

1989

**NOGAP B.6; VOLUME 6: PHYSICAL DATA COLLECTED IN THE BEAUFORT SEA,
SUMMER, 1987**

by

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Abstract

E. Carmack, J.E. Papadakis, D.M. Macdonald, and R.W. Macdonald, 1989. NOGAP B.6; Volume 6: Physical data collected in the Beaufort Sea, Summer 1987 Can. Data Rep. Hydrogr. Ocean Sci.: 60. 219pp.

As part of the NOGAP B.6 program, with major objectives to determine hydrocarbon pathways and primary productivity of the waters overlying the Beaufort Shelf, we measured water properties (biological, chemical and physical) across the shelf. These measurements were made during summer and complete a time series commencing in March, 1987. We report here the supporting physical oceanographic data, including temperature, salinity, light transmission and attenuation, density ($\gamma(S,t,0)$), departure from freezing point, and dynamic height.

Key words: Arctic, Beaufort Sea, density, oceanography, salinity, temperature, transmissivity

Résumé

E. Carmack, J.E. Papadakis, D.M. Macdonald, and R.W. Macdonald, 1988. NOGAP B.6; Volume 2: Physical data collected in the Beaufort Sea, Summer 1987. Can. Data Rep. Hydrogr. Ocean Sci.: 60. 219pp

Un des aspects du programme NOGAP B.6 consiste à déterminer le devenir des hydrocarbures et la productivité primaire dans les eaux du plateau côtier de la mer de Beaufort. Afin de rencontrer cet objectif, nous avons mesuré les propriétés (biologiques, chimiques, et physiques) des eaux dans ce milieu. Ces mesures furent effectuées au cours de l'été 1987 et complètent des séries temporelles d'acquisition de données d'océanographie physique de température, salinité, transmission et atténuation de la lumière, densité ($\gamma(S,t,0)$), écart par rapport au point de congélation, et hauteur dynamique.

Mots-clé: Artique, Mer de Beaufort, densité, océanographie, salinité, température, transmissivité..

Acknowledgements

This work was funded by Indian and Northern Affairs, Canada, as part of the Northern Oil and Gas Action Program. We thank the officers and crew of C.S.S. *John P. Tully* for their assistance during the field work. Thanks are due Energy, Mines and Resources, Polar Continental Shelf Project in Tuktoyaktuk, N.W.T. for accommodations for personnel in transit to and from the ship. S. Thomson assisted with advice on report layout. C. Gobeil translated the abstract into French.

1 INTRODUCTION

As part of a major inter-disciplinary study (NOGAP-B.6) to measure the transport and fate of hydrocarbons over the Beaufort Shelf and the primary productivity of these coastal waters, we conducted a sampling program aboard the C.S.S. *John P. Tully* in the summer of 1987. The primary logistic goals for the work done by Institute of Ocean Sciences staff in 1987 were to:

- Make measurements of physical, chemical and biological properties across the shelf and in particular to continue the time-series sampling on a transect across the shelf northward from Tuktoyaktuk.
- Deploy and recover moorings at the shelf edge to measure currents, light transmissivity, and sedimentation throughout the entire season (March 87 - March 88).
- Make measurements to delineate plume structure in the near-shore zone.

This document reports physical oceanographic data collected using a conductivity-temperature-transmissivity-depth (CTTD) probes. Companion NOGAP B.6 data reports providing the chemical, biological, sedimentation, and current records are listed here on the back cover.

1.1 Station Nomenclature

Each station has been given a two-part designation; xP-yQ, where x and y are numbers and P and Q are letters. The alpha-numeric *before* the hyphen refers to location; this is simply a number for planned stations on the main transect(s) across the shelf and a number followed by a letter for stations which were added on site (to trace interesting water features or substituted due to inability to land at the chosen site). For a few stations, the letter precedes the number; these are either the 4 'SS' stations at which we placed sequential trap/current meter moorings or near-shore stations which were added to the program in the field to delineate the plume structure (mostly CTTD transects). The alpha-numeric *after* the hyphen refers to time period (see itemized list below) and sequential visit to a station within time period (letter). An example of a typical station number would be 5A-2B; this refers to station 5A (close to station 5), the second sampling period (late April), and the third time within that period that we visited the station. Dates and locations for all stations are given in the Table headers. Data collection periods for the 1987 NOGAP B.6 arctic program are listed below, with bold font used for the physical data presented in this report.

1. March 30 - April 8 (ice work)
2. April 23 - April 28 (ice work)
3. May 23 - May 26 (ice work)
4. June 2 - July 30 (ice work (CTD only), Mackenzie River sampling)
5. **July 31 - August 30** (C.S.S. *John P. Tully*, shore peat sampling)
6. **Aug 31 - Sept 9** (C.S.S. *John P. Tully*)

1.2 Station Locations

Figures 1, 2, and 3 show the station locations for the sampling periods listed above. Positions were determined from a transit Satellite Navigator by the ship's officers. The majority of positions are expected to be within 1 km of the true position [Huggett and Mortimer; 1971], and our experience with re-navigating to mooring locations confirms this level of precision. Coverage extended beyond the shelf break reflecting the distance of ice retreat. CTD casts were performed at all stations, however, problems with the probe causing electronic spikes have led us to discard data at some of the stations where we were unable to assure data quality.

2 INSTRUMENTS

2.1 Guildline Conductivity-Temperature-Depth System

The Guildline model 8706 probe was equipped with a 2000 decibar pressure sensor. The output signal of the pressure sensor was subject to both noise and a pressure offset which varied in time. Plots of pressure versus time suggest the noise level approached ± 1.5 decibars. To estimate the pressure offset, the probe must be held at a fixed depth which is difficult in rough weather. We estimated the range in pressure offset over the entire cruise at 10.8 decibars with short-term (between individual casts) variation being generally less than 1.0 decibars. The worst case of a short-term jump in pressure offset was estimated at 6.3 decibars. For proper flushing of the conductivity cell, the probe should drop at a fall speed of 1.5 m/sec which is not achievable in water depths less than 15 m. Finally, the instrument occasionally yielded errors in conductivity ratio (spikes). These were removed during the despiking procedure described below.

2.2 Applied Microsystem Conductivity-Temperature-Depth System

We used an AML STD-12 (serial number 405) system with solid state memory. The instrument was factory calibrated before going into the field.

Software written at the Institute of Ocean Sciences (D. Macdonald) was used to program and operate the CTD in the field. Sampling rate (could be set to a function of time or pressure) depended on a selected pressure increment; this was chosen based on the depth of the station and the memory capacity of the instrument. The operating specifications of the instrument are listed in Table 1.

Table 1: AML CTD Specifications

Measurement	Precision	Accuracy
Salinity (psu)	± 0.01	0.06 ± 0.01 (biased low)
Temperature ($^{\circ}\text{C}$)	± 0.01	± 0.01
Pressure (decibar)	± 0.05	± 0.05

2.3 Sea-Tech Transmissometer

The Guildline and AML probes were fitted with Sea-Tech beam transmissometers which record percent light transmission over a given path length [Bartz *et al.*; 1978]. Specifications are listed in Table 2 (see page 6).

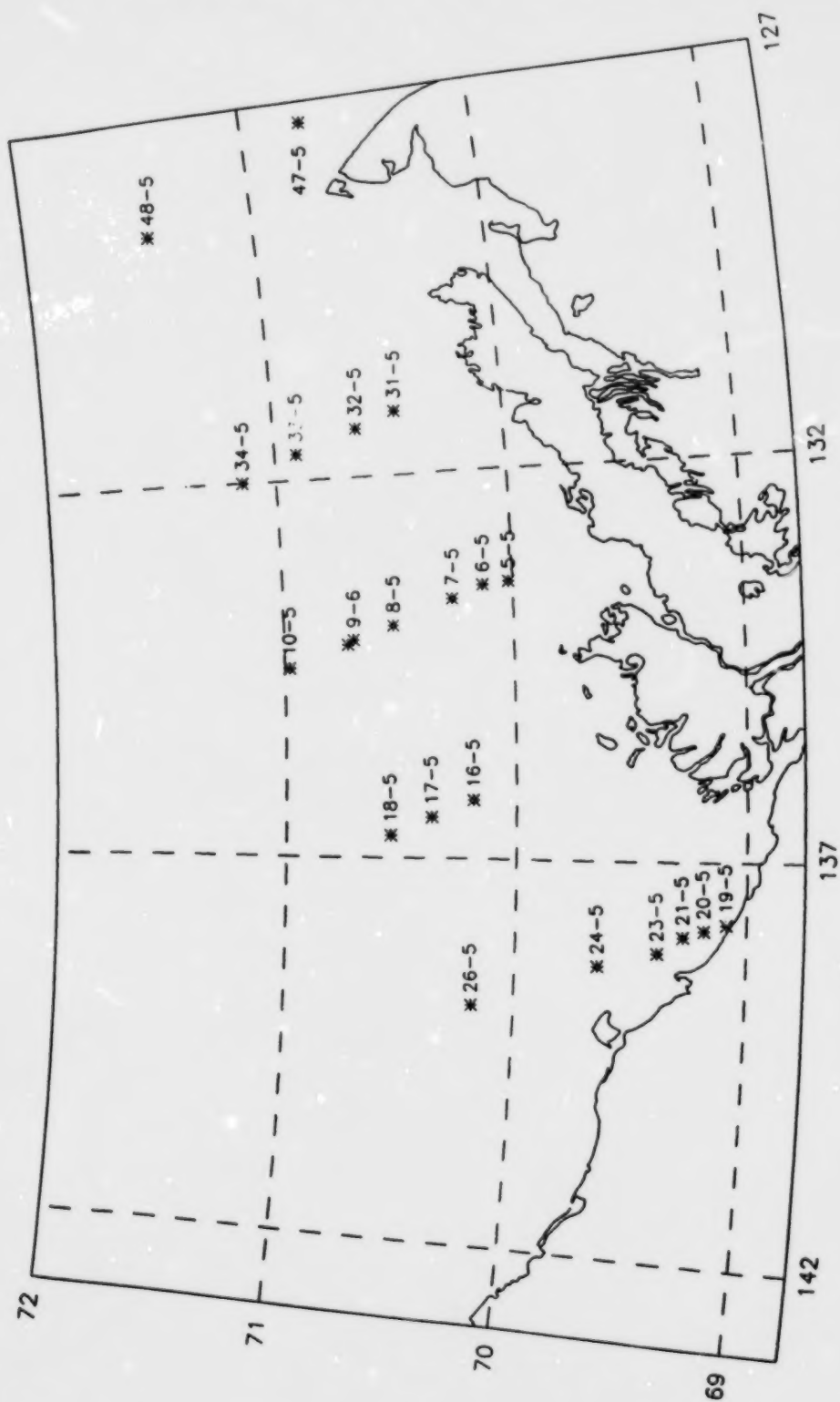


Figure 1: Guildline CTTD Period-5 Stations

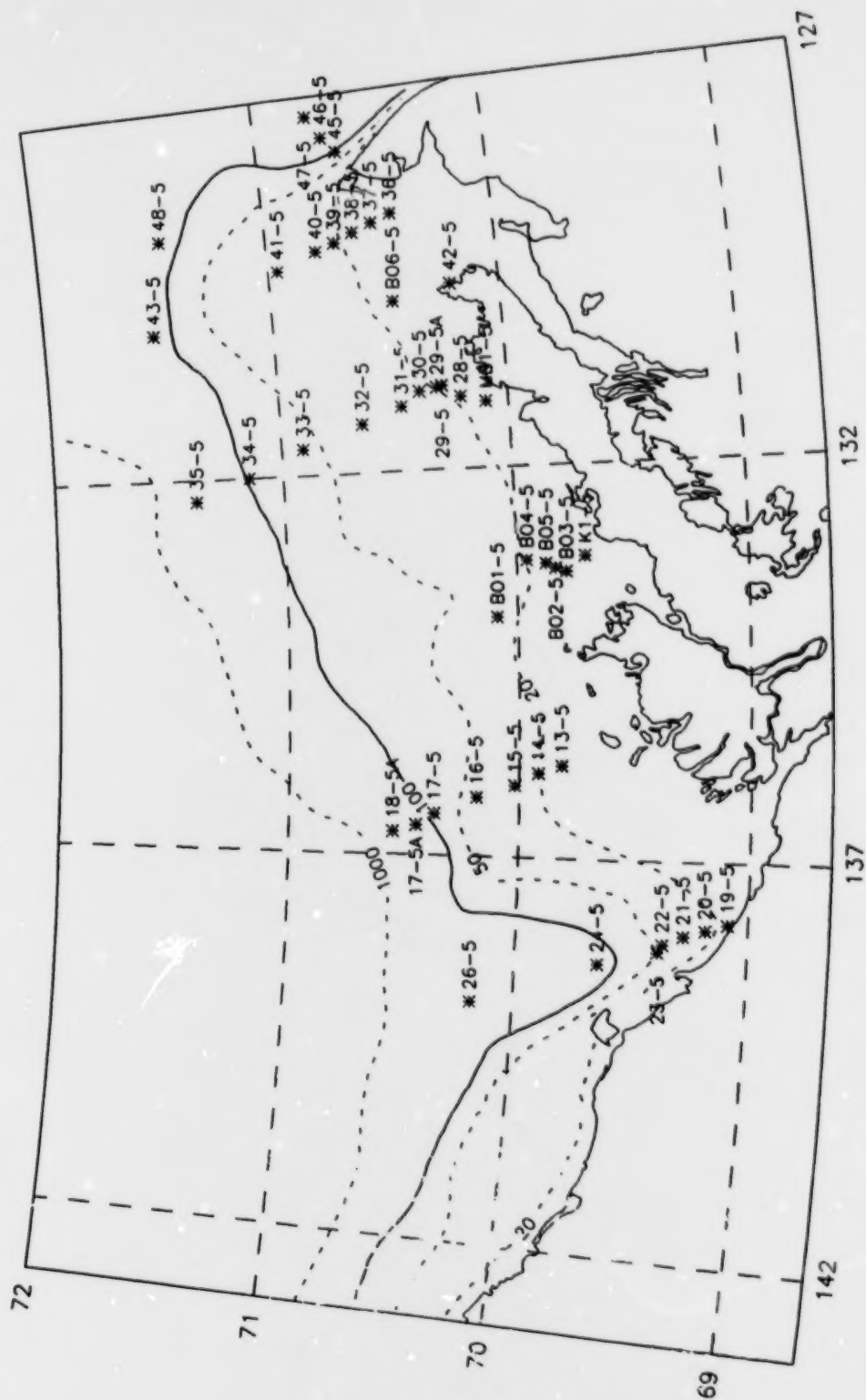


Figure 2: AML CTDD Period-5 Stations

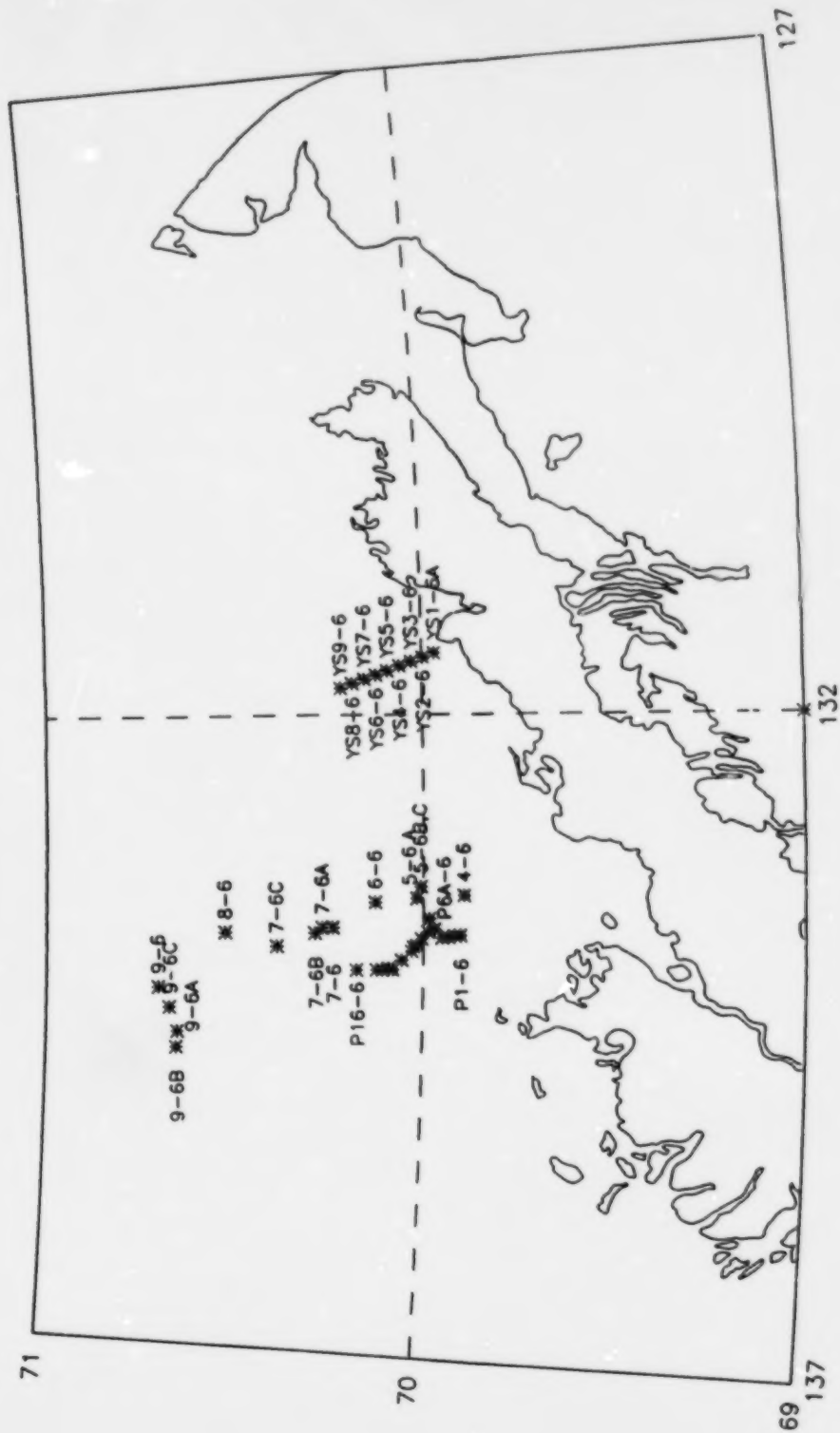


Figure 3: CTDD Period-6 Stations

Table 2: Transmissometer Configuration

Water Path Length	25 cm
Beam Diameter	15 mm
Transmitted Beam Collimation	< 5 milliradians
Receiver Acceptance Angle (in water)	< 18 milliradians
Light Source, Wavelength	LED, 660 nm
Range (in water)	0 - 100% (0-5 VDC)
Accuracy	±0.5%
Linearity	±0.1%
Temperature stability	±0.3% (0-25°C)

For a well-collimated monochromatic light in a scattering or absorbing medium, the light lost in transit is given by;

$$%T/100 = e^{-cr}$$

where c is attenuation coefficient (1/m) and r is the path length. (25 cm). Accuracy for transmissometers is best near the region $cr = 1$. Both the percent transmission and the calculated attenuation coefficient are reported in the accompanying data tables.

3 DATA PROCESSING

The Guildline data were recorded on audio cassette tape in the field. Using a digital input/output board and assembler program, the data were logged onto the disk drive of a Compaq Deskpro 386. The bit patterns were decoded into 4 byte integers, and then run through an automated despiking procedure that checked for outlying values. Finally, the data were calibrated, manually edited, and computed at one metre intervals. All software was written in FORTRAN for an IBM compatible personal computer.

3.1 Despiking

Three despiking procedures were used. The first computed a fit to small subsections of the cast, rejected values that departed from the fit by more than a specified number of standard deviations, and replaced these outlying values by interpolation. The second procedure treated especially noisy data by writing the offending records to a log file for later use with an interactive editor. The third procedure was an interactive editor by which the records were checked for standard deviation or first difference, and statistics were computed.

3.2 Calibration

Bottle samples collected independently during the cruise (i.e. not specifically for the purpose of CTTD calibration - see below under data validation) were used to check the calibration after the cruise. The bottle data have not been used to apply corrections to the CTTD output reported here in the data tables. A separate algorithm was used to compensate for the difference in response time between the temperature sensor and the conductivity cell.

3.3 Data Reduction

At 25 scans per second, the data are spaced 6 cm apart if the probe is falling at its optimal speed (1.5 m/s). The final step in data processing is to average the data in such a way as to reduce the depth resolution to 1 m. This is done using a binning procedure followed by a linear least squares fit and evaluating the fit at the central point of the bins.

The program also computes a number of derived quantities such as light attenuation, density ($\gamma(S,t,0)$), the departure from freezing point, speed of sound, and dynamic height [Foffonoff and Millard; 1983]

3.4 Algorithm limitations and data quality

There are a number of considerations which affect the quality of the Guildline CTTD data reported here. The pressure sensor has an offset which is not constant in time. A valid way to estimate this effect is to lower the instrument to a known fixed depth and record the instrument pressure response. Such a procedure cannot be carried out satisfactorily on a rolling ship; therefore our estimates are based on the procedure we used to start each cast, namely to bring the upper part of the probe level with the surface before commencing the downward cast. The pressure offset ranged from -14.8 to -4.0 decibars over the duration of the cruise; the change between casts was generally less than 1.0 decibar. The noise level of the pressure sensor was about 1.5 decibars. This makes it impossible to compute the instantaneous fall speed of the probe, crucial to correcting for sensor response times. This problem is further complicated by the ship's rolling motion which may cause the probe to move upwards for short periods of time during the downcast. We have no algorithm capable of distinguishing between a real upward motion and apparent upward motion caused by noise. The binning procedure during data reduction assumes the error in each depth estimate in the calibrated file is small compared to the desired bin size. Given the error associated with depth, a 1 m bin size is close to the limit of what the software is capable of handling. Efforts are currently underway to develop new algorithms to cope with these difficulties. Refer to a later section on data validation for a comparison between values extracted from the reduced files and data measured independently by bottle samples.

Finally, the Guildline's analog to digital converter had a "sticky" bit in the suppression section of the word it uses for encoding conductivity. The word length does not have enough bits to cover the entire conductivity range with sufficient accuracy, so the word is split up into a number and a "suppression" section (4 bits that essentially make up an offset). This problem was dealt with by hand-editing the sections of the cast where it occurred.

4 DATA VALIDATION

At many of the stations, bottle samples were collected and analyzed for temperature and salinity as part of the chemical program. These, in addition to serial casts by the two alternative CTTD systems were used to check calibrations of the CTTD instruments. The bottle data are reported in Macdonald *et al.*, 1988. We made the comparison on a point by point basis, selecting regions of the profiles where gradients were small. These occurred for the most part in the top 10 m, although several deeper samples were also usable. It should be noted that the CTTD casts and the bottle samples were not collected simultaneously, and therefore some of the differences in the intercomparison can be ascribed to environmental variance. With sufficient samples, however, we can examine with confidence the "average" offsets between bottle data and the CTTD (that is, $s_{\bar{x}} < 0.01$); we cannot measure salinity or temperature performance of the instrument while

passing through strong gradients (e.g. poor temperature correction response, slow flushing).

To quantify the bottle - CTTD intercomparison, the property differences $\Delta = X_{\text{bottle}} - X_{\text{CTTD}}$ were calculated for each point (S, and T) with the following results reported in Table 3.

Table 3: Results of the Bottle and CTTD Intercomparisons

	Salinity			Temperature		
	Δ	s	n	Δ	s	n
AML - Bottle	-0.0646	0.0619	35	-0.0080	0.0811	30
Guildline - Bottle	-0.025	0.079	21	-0.0008	0.071	12
Guildline - AML	0.060	0.054	16	-0.0107	0.0345	14

Units for salinity are in parts per thousand, and for temperature, Centigrade degrees; s refers to standard deviation, and n to the number of points at which Δ could be confidently calculated.

These calculations imply a salinity offset in the AML CTTD of about 0.06 parts per thousand low relative to the bottle data, the latter being referenced to IAPSO water [Macdonald *et al.*; 1988]. For the other measurements, no offsets were found.

Error (noise) in the CTTD measurement can be estimated by assuming the usual rule that variances add:

$$s_{\Delta}^2 = s_{\text{bottle}}^2 + s_{\text{CTTD}}^2$$

Using the standard deviations calculated for the bottle data [Macdonald *et al.*; 1988] we estimate for the Guildline CTTD salinity measurements - $s < 0.06$ parts per thousand, temperature - $s < 0.07$ Centigrade degrees, and for the AML CTTD salinity measurements, $s < 0.06$ parts per thousand, temperature - $s < 0.08$ Centigrade degrees. Keeping in mind that the bottle cast and the CTTD data were not collected at identical space/time coordinates, this estimate of error also includes an environmental component and therefore overestimates the instrumental error. From parts of the profiles where property gradients are low (e.g. the top 5 - 10 m, most stations), it is apparent that the instrumental standard deviations are probably closer to 0.01, both for salinity and temperature. As noted, the above treatments do not include error which arises in steep property gradients where both sensor response and flushing times are long relative to environmental changes experienced by the instrument during its descent.

5 References

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UNESCO, 1987. International Oceanographic Tables, Vol. 4: Properties derived from the International Equation of State of Seawater, 1980. *UNESCO technical papers in marine science*, 40, various pagings.

6 APPENDIX A; GUILDLINE CTTD DATA; TABLES AND PLOTS

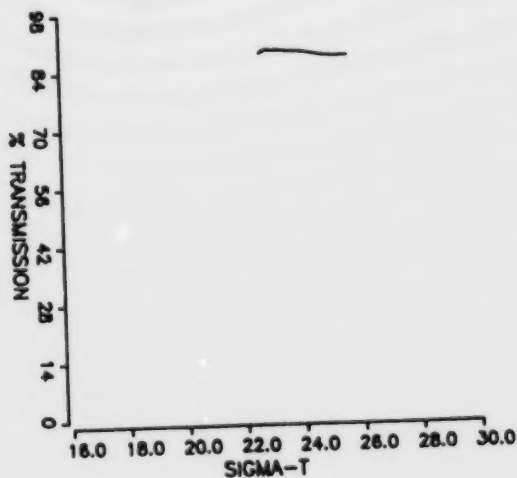
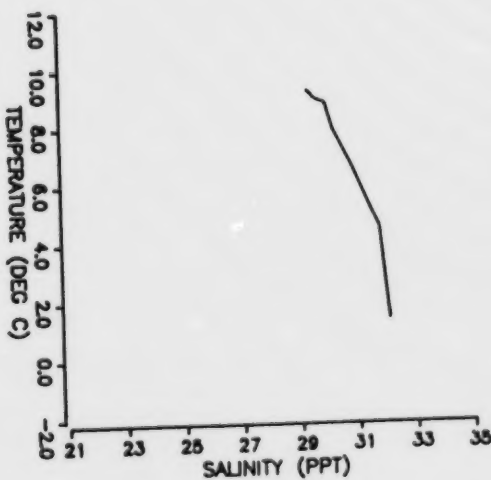
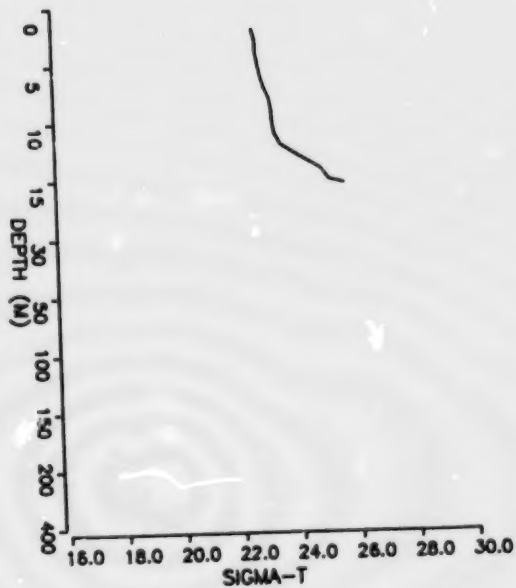
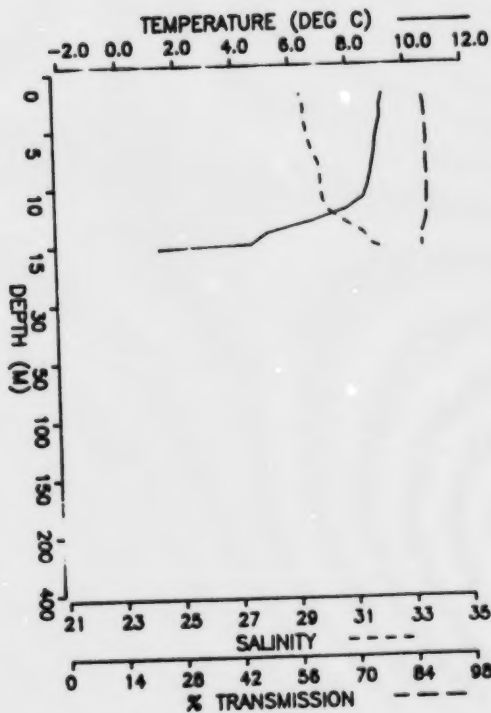
Units and abbreviations used in the computer listings which are included in the following appendix are summarized below.

Measurement	Abbreviation	Units
DEPTH	DEPTH	METRES (M)
TEMPERATURE	TEMP	DEGREES CENTIGRADE (DEG C)
SALINITY	SALN	PARTS PER THOUSAND (PPT)
TRANSMISSION	TRNS	PERCENT (%)
LIGHT ATTENUATION	ATTN	1/METRE (1/M)
DENSITY†	SIGT	KILOGRAM/METRE ³ (KG/M ³)
DEPARTURE FROM FREEZING	T-Tf	CENTIGRADE DEGREES (DEG C)
DYNAMIC HEIGHT ANOMALY	DYN HT	METRES (M)

† The quantity reported for density is actually $\gamma(S,t,0)$ [UNESCO, 1987].

STATION 5-5 LAT 70 1.1 N LONG 133 26.1 W DATE 09:05 PDT ON 03/08/ 87

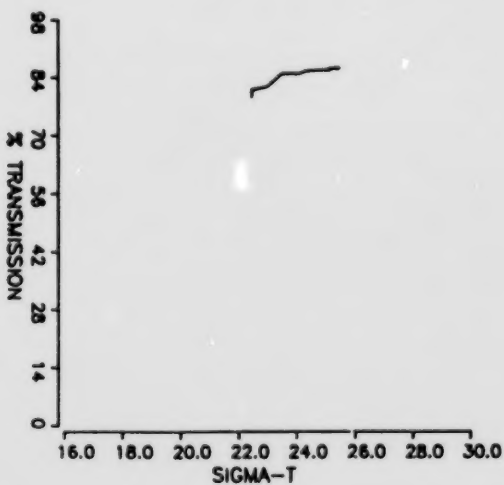
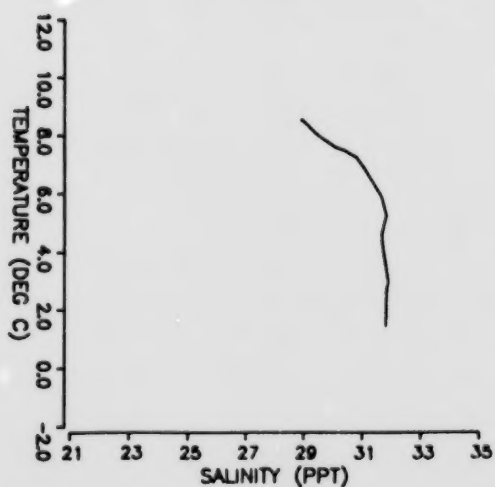
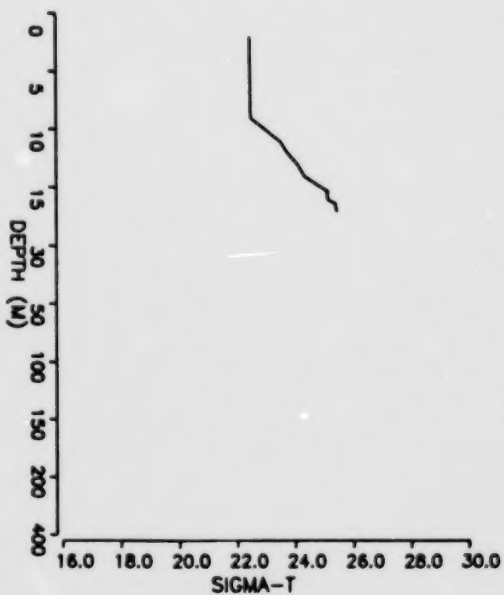
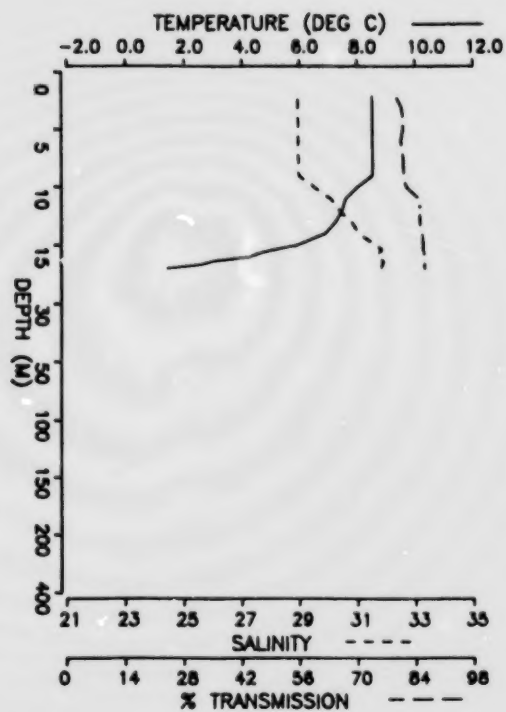
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2.0	9.26	29.38	88.3	0.50	22.68	10.86	0.10
3.0	9.15	29.48	88.6	0.48	22.78	10.76	0.16
4.0	9.16	29.49	88.9	0.47	22.78	10.78	0.21
5.0	9.06	29.55	89.0	0.47	22.85	10.67	0.26
6.0	8.98	29.64	89.1	0.46	22.93	10.60	0.31
7.0	8.93	29.77	89.0	0.47	23.04	10.56	0.36
8.0	8.85	29.97	88.9	0.47	23.20	10.49	0.41
9.0	8.77	30.02	89.0	0.46	23.26	10.41	0.45
10.0	8.68	30.03	89.0	0.47	23.28	10.32	0.50
12.0	7.92	30.24	88.8	0.47	23.55	9.58	0.59
14.0	5.17	31.48	87.7	0.52	24.87	6.90	0.66
16.0	1.37	32.09	87.6	0.53	25.69	3.13	0.72



STATION 5-5 CAST # 87804 DATE : 09:05 PDT ON 03/08/ 87
 WATER DEPTH 28.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 1.06 N LONG : 133 26.13 W

STATION 6-5 LAT 70 7.8 N LONG 133 28.3 W DATE 00.48 PDT ON 07/08/ 87

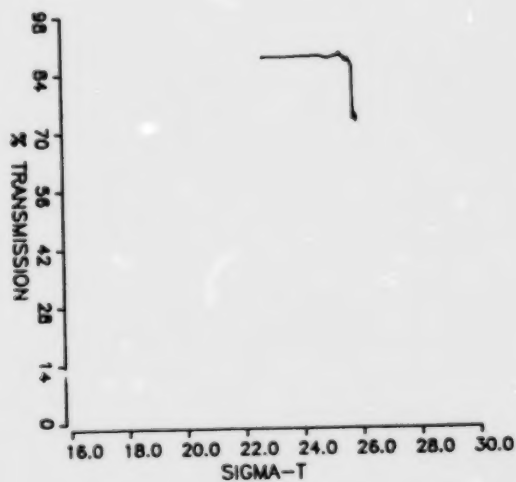
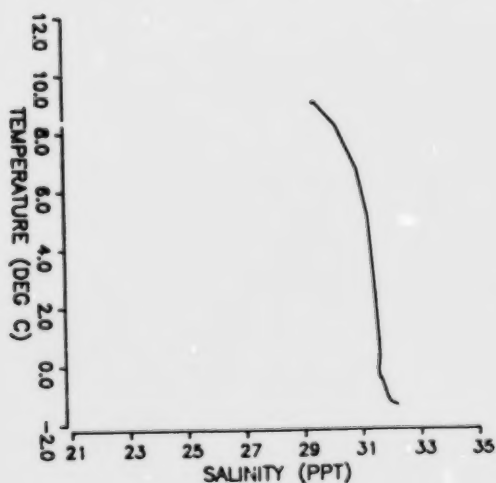
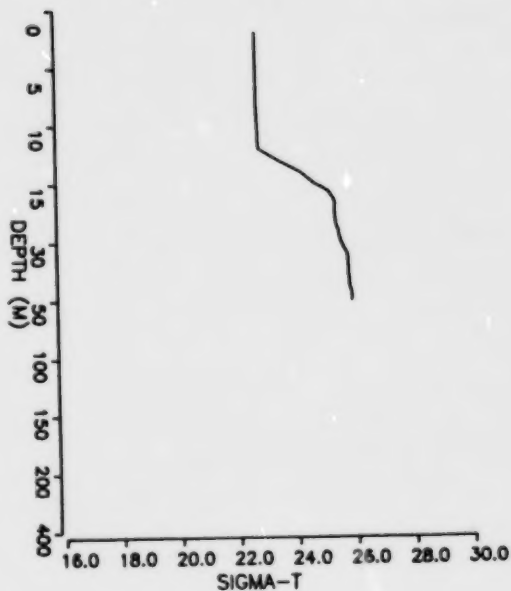
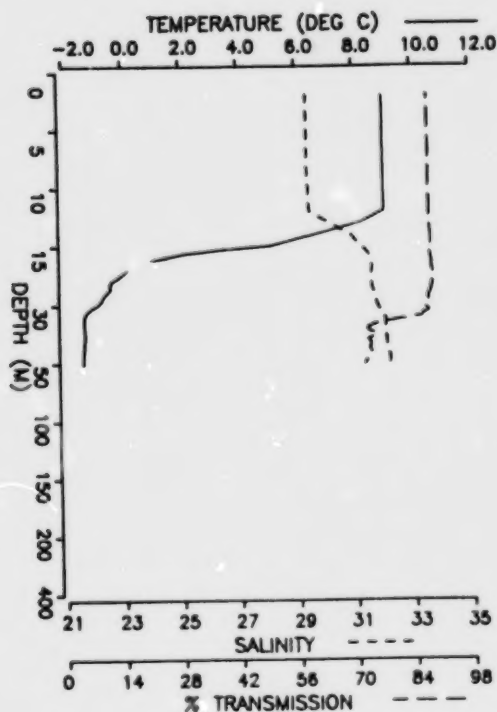
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	P-Tf	DYN HT
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3.0	8.53	28.96	80.6	0.86	22.46	10.11	0.16
4.0	8.53	28.97	81.1	0.84	22.47	10.11	0.22
5.0	8.53	28.97	81.1	0.84	22.47	10.11	0.27
6.0	8.53	28.97	80.6	0.86	22.47	10.11	0.33
7.0	8.53	28.97	81.1	0.84	22.47	10.12	0.38
8.0	8.53	28.98	81.1	0.84	22.47	10.12	0.43
9.0	8.53	28.99	81.2	0.83	22.48	10.11	0.49
10.0	8.01	29.54	81.9	0.80	22.99	9.63	0.54
12.0	7.49	30.41	85.1	0.65	23.74	9.16	0.63
14.0	6.92	31.06	85.7	0.62	24.33	8.63	0.71
16.0	5.24	31.85	85.8	0.61	25.15	7.00	0.77
18.0	4.28	31.72	86.3	0.59	25.15	6.03	0.83
20.0	2.61	31.85	86.2	0.59	25.40	4.37	0.88
21.0	1.44	31.83	86.4	0.59	25.47	3.20	0.91



STATION 8-5 CAST # 87810 DATE : 00:46 PDT ON 07/08/ 87
 WATER DEPTH 39.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 7.82 N LONG : 113 28.31 W

STATION	LAT		LONG		DATE		
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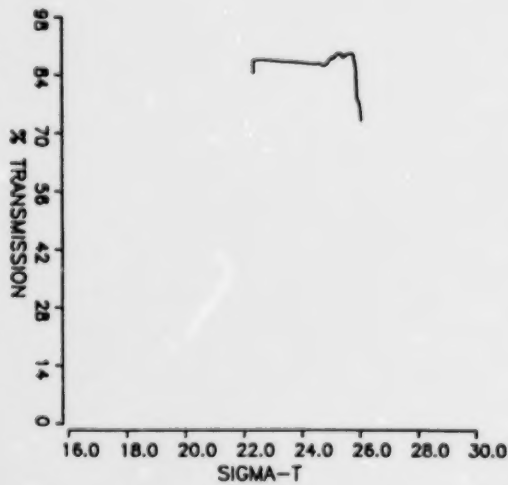
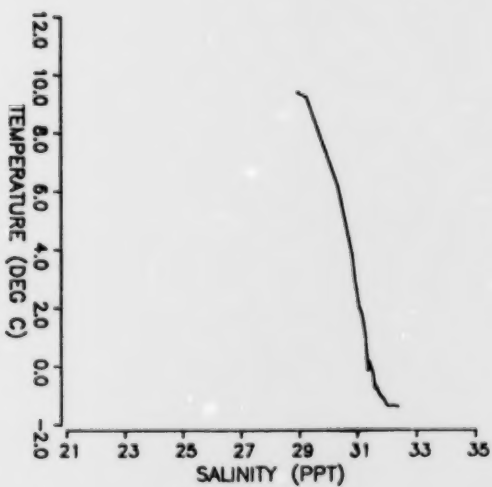
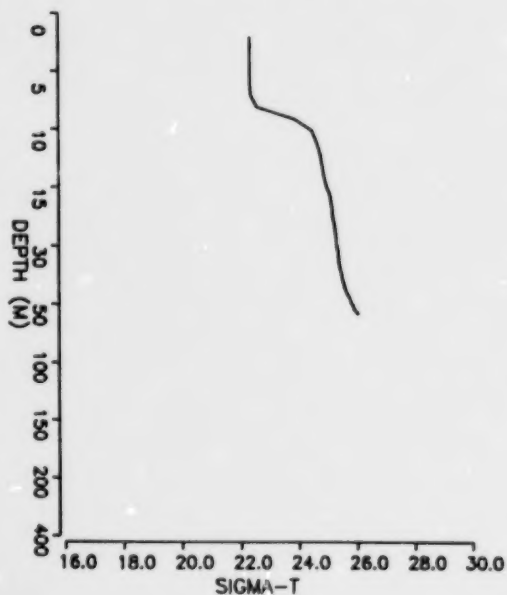
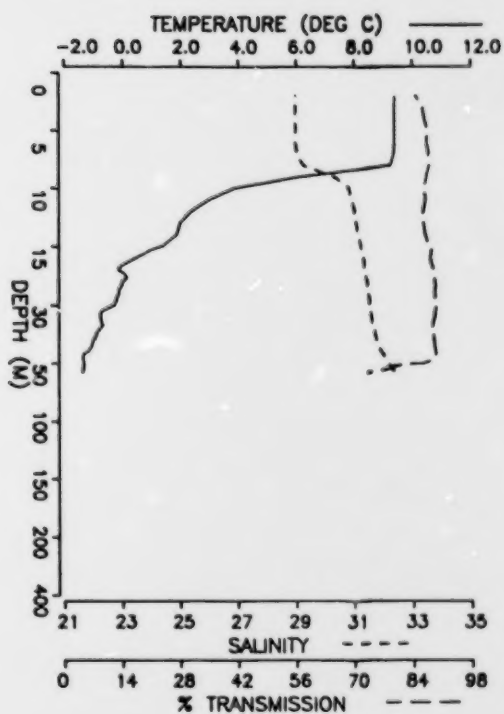
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2.0	9.02	29.38	87.9	0.52	22.72	10.63	0.10
3.0	9.03	29.38	87.9	0.52	22.72	10.63	0.16
4.0	9.03	29.38	87.9	0.51	22.72	10.63	0.21
5.0	9.02	29.38	87.9	0.51	22.72	10.63	0.26
6.0	9.02	29.38	88.0	0.51	22.72	10.63	0.31
7.0	9.03	29.38	88.0	0.51	22.72	10.63	0.36
8.0	9.03	29.38	88.0	0.51	22.72	10.64	0.41
9.0	9.03	29.40	87.9	0.52	22.73	10.64	0.47
10.0	9.04	29.43	86.0	0.51	22.76	10.65	0.52
12.0	9.04	29.45	88.0	0.51	22.77	10.66	0.62
14.0	6.70	30.88	88.3	0.50	24.21	8.40	0.71
16.0	3.50	31.38	87.7	0.52	24.95	5.23	0.78
18.0	1.50	31.54	88.3	0.50	25.23	3.24	0.83
20.0	0.39	31.61	88.4	0.49	25.35	2.13	0.89
22.0	0.04	31.58	88.9	0.47	25.34	1.79	0.94
24.0	-0.38	31.58	88.7	0.48	25.37	1.36	0.99
26.0	-0.42	31.63	88.4	0.50	25.40	1.33	1.04
28.0	-0.67	31.71	87.5	0.53	25.48	1.08	1.10
30.0	-0.85	31.79	87.1	0.55	25.55	0.91	1.15
35.0	-1.33	32.05	81.5	0.82	25.77	0.45	1.26
40.0	-1.31	32.08	75.3	1.13	25.79	0.48	1.37
45.0	-1.34	32.10	73.5	1.23	25.81	0.45	1.48
50.0	-1.37	32.20	72.6	1.28	25.89	0.43	1.59
51.0	-1.37	32.20	72.3	1.30	25.89	0.43	1.61



STATION 7-5 CAST # 87809 DATE : 08:20 PDT ON 06/08/ 87
 WATER DEPTH 51.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 15.79 N LONG : 133 38.04 W

STATION 8-5 LAT 70 31.3 N LONG 133 57.2 W DATE 16:35 PDT ON 05/08/ 87

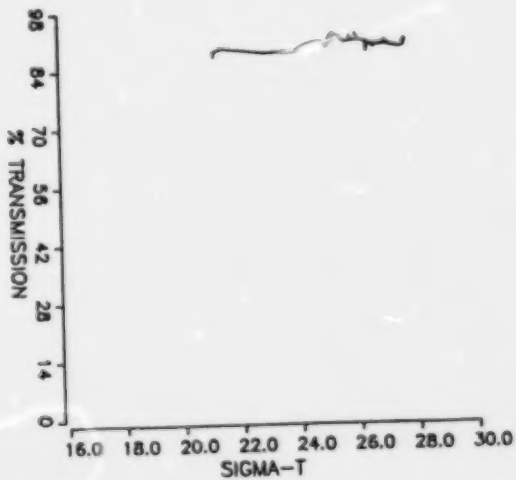
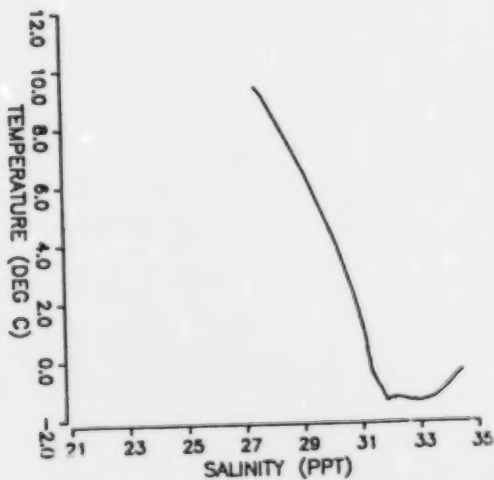
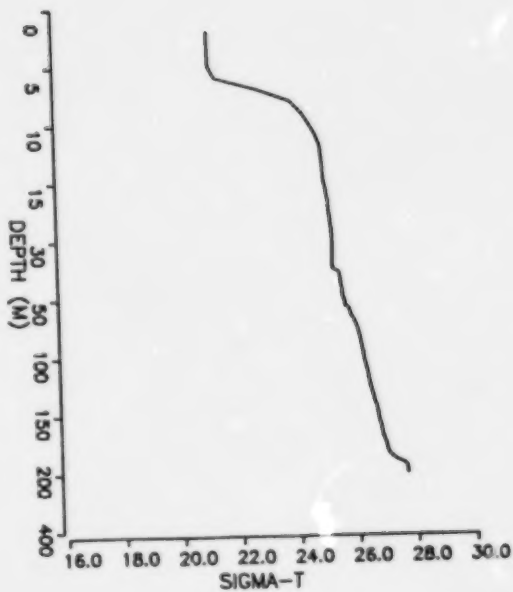
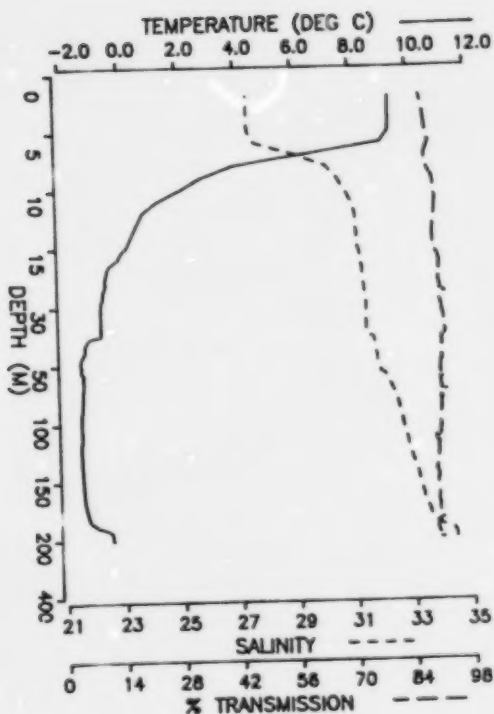
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	9.41	28.98	84.8	0.66	22.35	10.99	0.11
3.0	9.39	28.98	86.4	0.58	22.35	10.98	0.17
4.0	9.39	28.98	86.8	0.57	22.35	10.98	0.22
5.0	9.39	28.98	87.6	0.53	22.35	10.97	0.28
6.0	9.39	28.98	87.3	0.54	22.35	10.97	0.33
7.0	9.37	29.02	87.8	0.52	22.38	10.96	0.39
8.0	9.26	29.27	87.9	0.52	22.60	10.86	0.44
9.0	6.14	30.35	87.2	0.55	23.87	7.81	0.49
10.0	3.91	30.82	86.9	0.56	24.47	5.60	0.53
12.0	2.40	31.02	86.5	0.58	24.75	4.10	0.59
14.0	1.88	31.14	86.9	0.56	24.89	3.60	0.66
16.0	0.98	31.29	88.5	0.49	25.06	2.70	0.72
18.0	0.46	31.32	88.2	0.50	25.12	2.19	0.77
20.0	-0.04	31.35	88.6	0.48	25.16	1.69	0.83
22.0	0.06	31.38	89.0	0.47	25.18	1.79	0.89
24.0	0.00	31.44	89.2	0.46	25.24	1.73	0.94
26.0	-0.13	31.48	89.3	0.45	25.27	1.61	1.00
28.0	-0.19	31.52	89.4	0.45	25.30	1.55	1.05
30.0	-0.29	31.54	89.4	0.45	25.33	1.46	1.10
35.0	-0.75	31.60	89.1	0.46	25.39	1.01	1.24
40.0	-0.91	31.73	88.9	0.47	25.50	0.85	1.36
45.0	-1.11	31.88	89.3	0.45	25.63	0.66	1.49
50.0	-1.33	32.17	86.3	0.59	25.87	0.46	1.60
55.0	-1.36	32.31	77.7	1.01	25.98	0.45	1.70
58.0	-1.38	32.40	73.1	1.26	26.06	0.44	1.78



STATION 8-5 CAST # 87808 DATE : 16:35 PDT ON 05/08/ 87
 WATER DEPTH 59.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 31.30 N LONG : 133 57.15 W

STATION 10-5 LAT 70 58.8 N LONG 134 29.4 W DATE 08:45 PDT ON 04/08/ 87

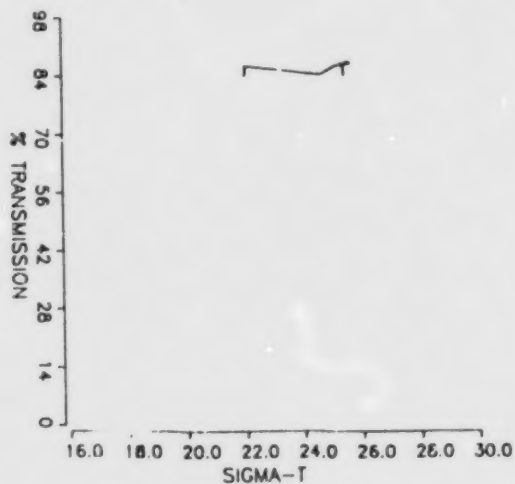
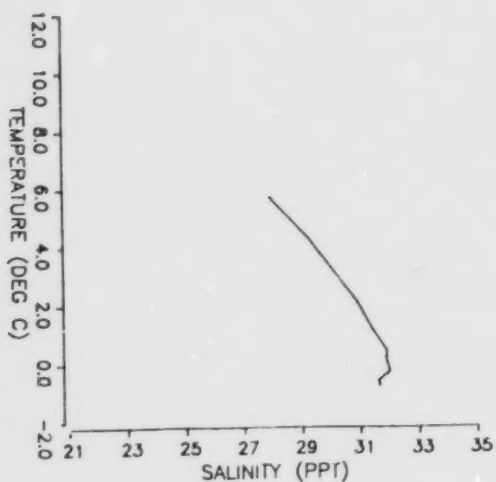
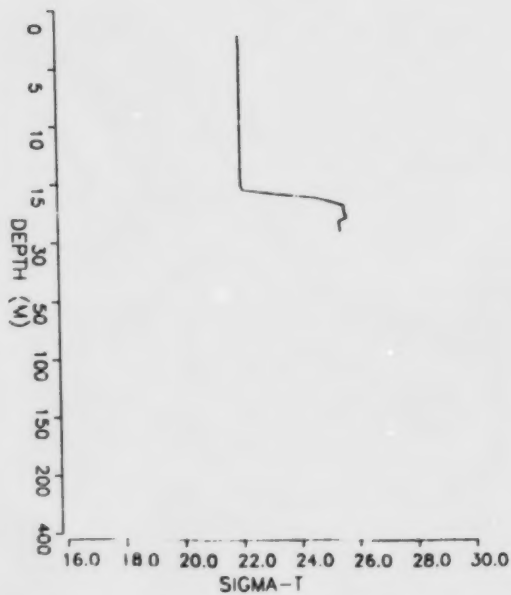
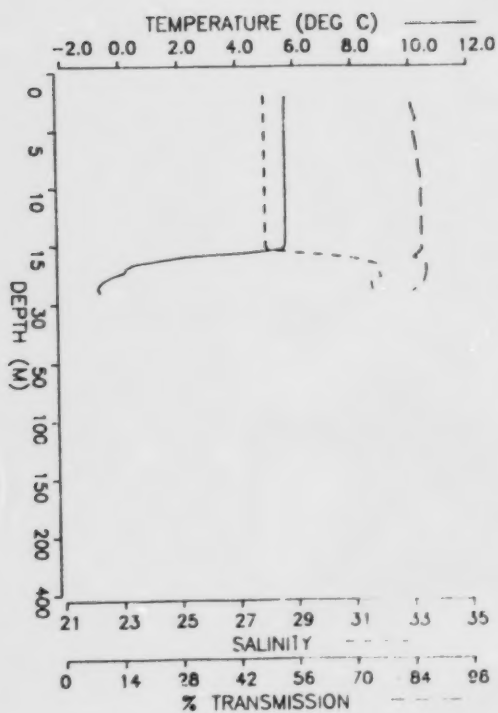
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	9.36	27.44	87.1	0.55	21.15	10.86	0.13
3.0	9.36	27.44	87.8	0.52	21.15	10.86	0.20
4.0	9.36	27.44	88.1	0.50	21.13	10.86	0.27
5.0	9.35	27.46	88.5	0.49	21.17	10.85	0.33
6.0	9.06	27.70	89.3	0.46	21.40	10.57	0.40
7.0	8.46	29.08	88.1	0.51	22.83	8.05	0.46
8.0	3.94	30.16	88.2	0.50	23.94	5.59	0.50
9.0	2.84	30.53	89.8	0.43	24.33	4.51	0.54
10.0	2.14	30.77	90.3	0.41	24.58	3.83	0.58
12.0	0.80	31.13	90.2	0.41	24.94	2.51	0.64
14.0	0.39	31.17	89.6	0.44	25.00	2.11	0.70
16.0	0.06	31.23	89.7	0.44	25.06	1.77	0.76
18.0	-0.10	31.27	90.9	0.38	25.10	1.63	0.82
20.0	-0.43	31.33	91.1	0.37	25.16	1.30	0.87
22.0	-0.51	31.35	91.9	0.34	25.18	1.22	0.93
24.0	-0.54	31.38	90.7	0.39	25.21	1.19	0.99
26.0	-0.61	31.40	91.1	0.37	25.23	1.13	1.04
28.0	-0.63	31.44	91.3	0.37	25.26	1.11	1.10
30.0	-0.71	31.45	91.3	0.36	25.27	1.03	1.15
35.0	-0.71	31.45	92.0	0.34	25.27	1.04	1.29
40.0	-0.71	31.45	92.3	0.32	25.27	1.04	1.42
45.0	-1.28	31.75	91.4	0.36	25.53	0.49	1.55
50.0	-1.44	31.84	90.8	0.39	25.60	0.33	1.67
55.0	-1.42	31.91	90.8	0.39	25.66	0.37	1.79
60.0	-1.34	32.08	91.1	0.37	25.80	0.46	1.90
65.0	-1.34	32.15	90.8	0.38	25.86	0.47	2.01
70.0	-1.35	32.29	91.0	0.38	25.97	0.47	2.12
75.0	-1.37	32.38	90.9	0.38	26.04	0.45	2.22
80.0	-1.39	32.46	90.9	0.38	26.11	0.45	2.31
85.0	-1.40	32.52	91.0	0.38	26.16	0.45	2.41
90.0	-1.41	32.56	90.9	0.38	26.19	0.44	2.50
95.0	-1.43	32.61	90.9	0.38	26.23	0.43	2.59
100.0	-1.45	32.65	90.8	0.39	26.26	0.41	2.68
110.0	-1.43	32.75	90.6	0.40	26.34	0.44	2.85
120.0	-1.46	32.84	90.2	0.41	26.42	0.43	3.01
130.0	-1.46	32.95	90.0	0.42	26.51	0.44	3.17
140.0	-1.44	33.07	89.7	0.44	26.60	0.47	3.32
150.0	-1.42	33.20	89.8	0.43	26.71	0.51	3.46
175.0	-1.31	33.50	90.1	0.42	26.95	0.65	3.76
200.0	-0.45	34.42	89.8	0.43	27.66	1.58	3.96
206.0	-0.41	34.46	91.2	0.37	27.69	1.63	3.99



STATION 10-5 CAST # 87B05 DATE : 08:45 PDT ON 04/08/ 87
 WATER DEPTH 210.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 58.79 N LONG : 134 29.36 W

STATION 16-5 LAT 70 11.2 N LONG 136 15.2 W DATE 15:25 PDT ON 30/08/ 87

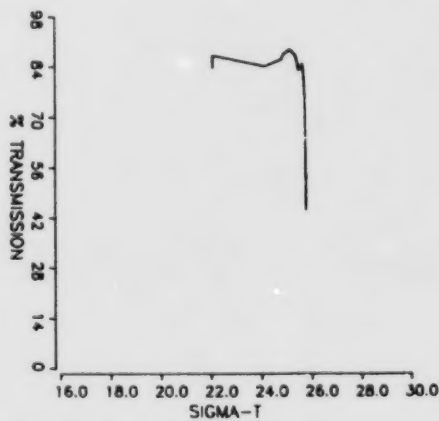
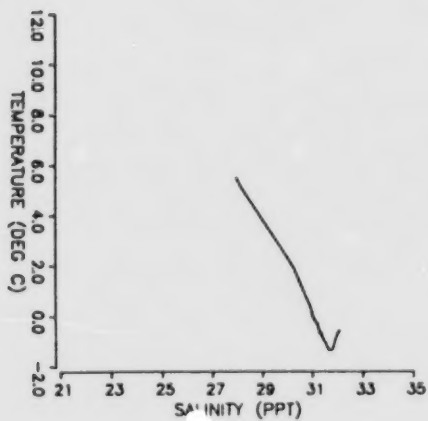
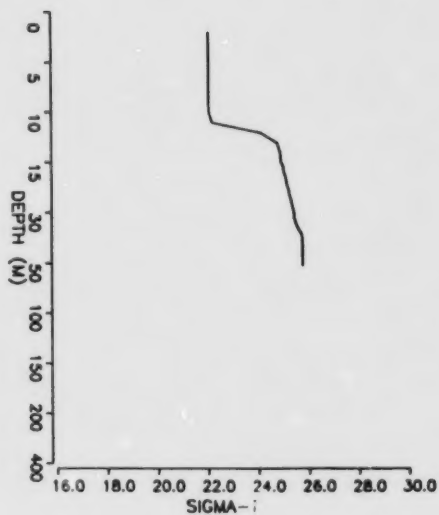
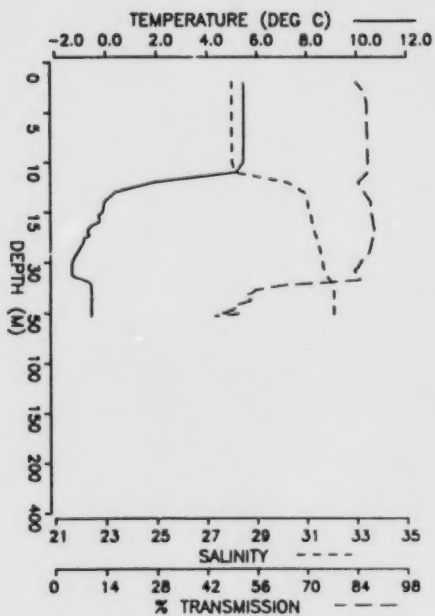
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.71	27.95	84.4	0.68	22.02	7.24	0.12
3.0	5.69	27.96	84.4	0.68	22.03	7.22	0.18
4.0	5.69	27.96	85.5	0.63	22.03	7.21	0.23
5.0	5.69	27.97	84.8	0.66	22.03	7.22	0.29
6.0	5.70	27.96	85.3	0.64	22.03	7.22	0.35
7.0	5.69	27.97	85.7	0.62	22.03	7.22	0.41
8.0	5.69	27.97	86.0	0.61	22.03	7.22	0.47
9.0	5.69	27.96	86.5	0.58	22.03	7.22	0.53
10.0	5.69	27.97	86.6	0.58	22.03	7.22	0.58
12.0	5.68	27.97	86.6	0.58	22.04	7.22	0.70
14.0	5.68	27.97	86.6	0.58	22.04	7.22	0.82
16.0	5.60	28.04	86.6	0.57	22.10	7.14	0.93
18.0	2.17	30.87	84.6	0.67	24.65	3.87	1.03
20.0	0.44	31.90	87.6	0.53	25.59	2.20	1.08
22.0	0.11	31.90	87.6	0.53	25.60	1.88	1.13
24.0	-0.58	31.51	87.2	0.55	25.40	1.17	1.18
26.0	-0.80	31.66	85.2	0.64	25.44	0.95	1.23
27.0	-0.72	31.68	84.1	0.69	25.46	1.03	1.26



STATION 16-5 CAST # 87830 DATE : 15:25 PDT ON 30/08/ 87
 WATER DEPTH 43.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 11.20 N LONG : 136 15.20 W

STATION 17-5 LAT 70 22.1 N LONG 136 28.2 W DATE 18:05 PDT ON 30/08/ 87

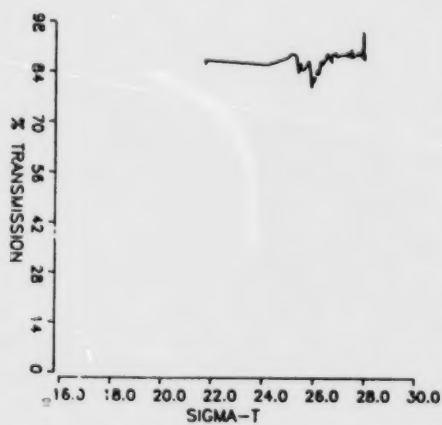
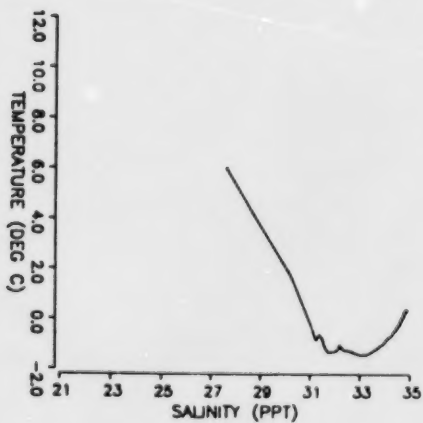
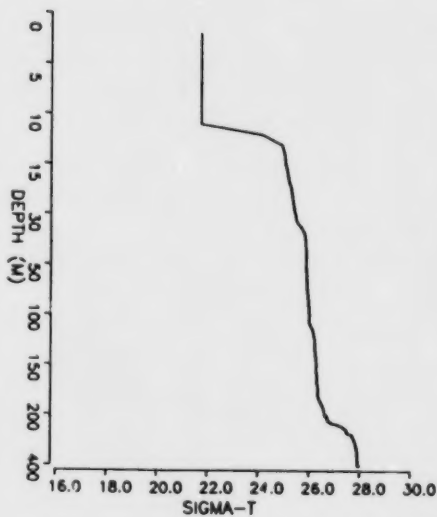
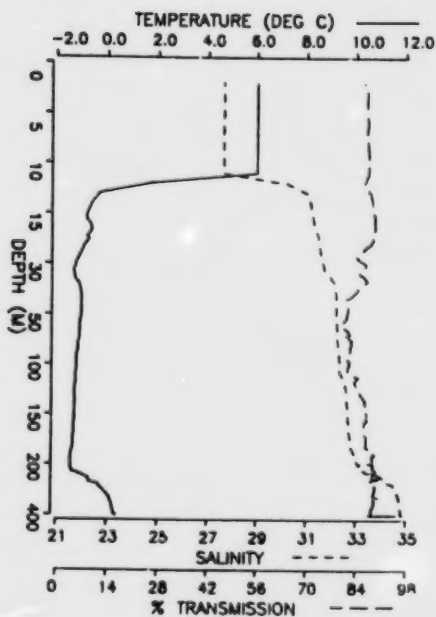
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.48	27.99	83.9	0.70	22.08	7.01	0.12
3.0	5.48	27.99	86.2	0.59	22.08	7.01	0.17
4.0	5.48	27.99	86.8	0.56	22.08	7.01	0.23
5.0	5.48	28.00	86.9	0.56	22.08	7.01	0.29
6.0	5.48	27.99	86.9	0.56	22.08	7.01	0.35
7.0	5.48	28.00	87.0	0.56	22.08	7.01	0.41
8.0	5.47	28.00	87.1	0.55	22.08	7.00	0.46
9.0	5.47	28.00	87.1	0.55	22.08	7.00	0.52
10.0	5.46	28.00	87.1	0.55	22.09	6.99	0.58
12.0	1.97	30.24	84.4	0.68	24.16	3.63	0.68
14.0	-0.06	31.05	88.0	0.51	24.92	1.65	0.75
16.0	-0.29	31.18	88.2	0.50	25.03	1.42	0.81
18.0	-0.27	31.21	88.5	0.49	25.06	1.45	0.87
20.0	-0.68	31.29	88.9	0.47	25.14	1.04	0.93
22.0	-0.64	31.35	88.8	0.47	25.19	1.09	0.98
24.0	-0.88	31.43	88.0	0.51	25.26	0.86	1.04
26.0	-1.03	31.52	87.7	0.52	25.34	0.71	1.09
28.0	-1.19	31.58	86.7	0.57	25.39	0.55	1.14
30.0	-1.33	31.64	85.0	0.65	25.44	0.43	1.20
35.0	-1.34	31.78	83.5	0.72	25.55	0.43	1.32
40.0	-0.57	32.07	59.3	2.09	25.77	1.21	1.44
45.0	-0.57	32.08	54.4	2.43	25.78	1.22	1.55
50.0	-0.57	32.08	46.3	3.08	25.78	1.22	1.66
53.0	-0.57	32.08	44.1	3.28	25.78	1.22	1.73



STATION 17-5 CAST # 87831 DATE : 18:05 PDT ON 30/08/ 87
 WATER DEPTH 54.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 22.10 N LONG : 136 28.20 W

STATION 18-5 LAT 70 32.8 N LONG 136 42.5 W DATE 22:55 PDT ON 30/08/ 87

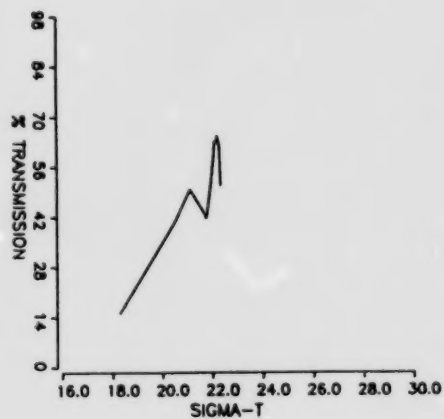
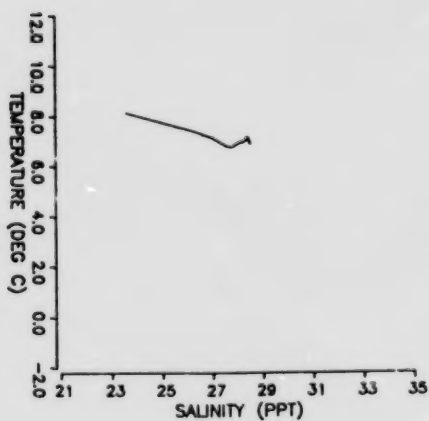
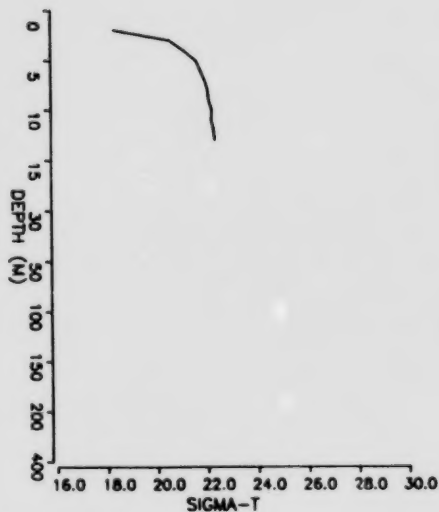
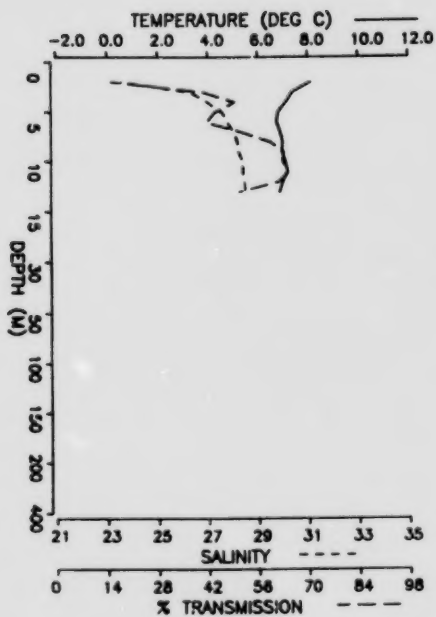
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.01	27.63	86.2	0.59	21.74	7.51	0.12
3.0	6.00	27.64	87.1	0.55	21.74	7.51	0.18
4.0	6.01	27.64	86.9	0.56	21.74	7.51	0.24
5.0	6.01	27.64	86.9	0.56	21.74	7.51	0.31
6.0	6.01	27.64	87.2	0.55	21.74	7.51	0.37
7.0	6.01	27.64	86.9	0.56	21.74	7.52	0.43
8.0	6.01	27.64	87.1	0.55	21.74	7.52	0.49
9.0	6.01	27.64	87.4	0.54	21.74	7.52	0.55
10.0	6.00	27.64	87.5	0.54	21.74	7.52	0.61
12.0	1.74	30.22	86.2	0.59	24.16	3.40	0.72
14.0	-0.62	31.16	88.6	0.48	25.03	1.09	0.79
16.0	-0.82	31.25	89.3	0.45	25.11	0.90	0.85
18.0	-0.69	31.32	89.3	0.45	25.16	1.04	0.90
20.0	-0.61	31.38	89.2	0.46	25.21	1.12	0.96
22.0	-0.61	31.48	88.9	0.47	25.29	0.93	1.01
24.0	-0.64	31.52	88.2	0.50	25.33	0.90	1.07
26.0	-0.98	31.55	86.1	0.60	25.36	0.77	1.12
28.0	-1.11	31.59	84.0	0.70	25.40	0.64	1.17
30.0	-1.25	31.67	86.8	0.57	25.46	0.51	1.22
35.0	-1.30	31.96	86.2	0.60	25.70	0.48	1.35
40.0	-1.07	32.17	84.5	0.67	25.86	0.72	1.46
45.0	-1.03	32.21	81.7	0.81	25.89	0.77	1.56
50.0	-1.03	32.21	81.6	0.81	25.89	0.77	1.67
55.0	-1.04	32.22	81.3	0.83	25.90	0.76	1.77
60.0	-1.09	32.24	80.0	0.89	25.92	0.72	1.88
65.0	-1.08	32.24	81.6	0.81	25.92	0.73	1.98
70.0	-1.10	32.25	82.3	0.78	25.93	0.72	2.09
75.0	-1.11	32.26	82.4	0.78	25.93	0.72	2.19
80.0	-1.17	32.28	82.9	0.75	25.96	0.66	2.29
85.0	-1.16	32.31	82.5	0.77	25.98	0.67	2.40
90.0	-1.19	32.33	82.1	0.79	25.99	0.64	2.50
95.0	-1.22	32.34	81.7	0.81	26.00	0.62	2.60
100.0	-1.22	32.36	82.2	0.78	26.02	0.63	2.70
110.0	-1.24	32.40	82.7	0.76	26.06	0.61	2.90
120.0	-1.25	32.56	84.0	0.70	26.19	0.62	3.09
130.0	-1.28	32.62	85.2	0.64	26.23	0.60	3.27
140.0	-1.28	32.65	85.5	0.58	26.26	0.61	3.44
150.0	-1.30	32.69	87.3	0.54	26.29	0.60	3.62
175.0	-1.34	32.79	86.9	0.56	26.37	0.59	4.04
200.0	-1.42	33.20	87.0	0.56	26.71	0.54	4.43
225.0	-1.39	33.32	89.4	0.45	26.80	0.60	4.75
250.0	-0.88	34.02	88.6	0.48	27.35	1.17	4.99
300.0	-0.17	34.60	89.3	0.45	27.79	1.94	5.23
350.0	0.18	34.76	89.2	0.46	27.90	2.34	5.35
400.0	0.31	34.82	88.4	0.50	27.94	2.51	5.44



STATION 18-5 CAST # 87833 DATE : 22:55 PDT ON 30/08/ 87
 WATER DEPTH 650.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 32.80 N LONG : 136 42.50 W

STATION	LAT		LONG		DATE		
19-5	69	5.3 N	137	45.7 W	17:05 PDT ON	27/08/	87

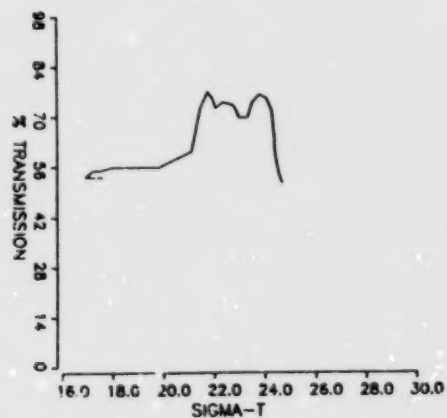
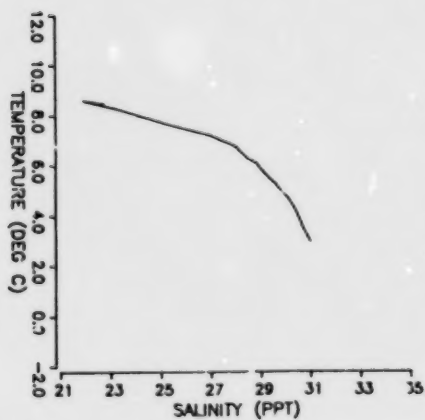
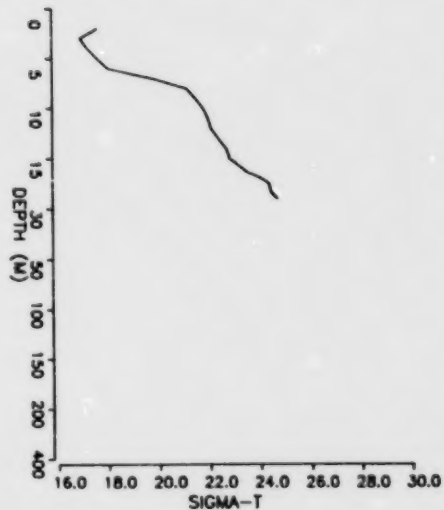
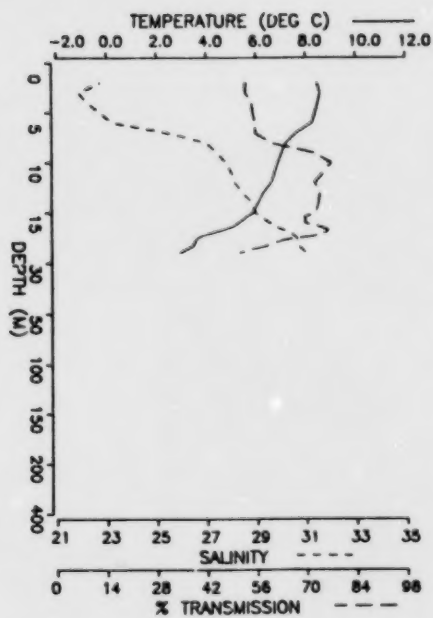
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	8.14	23.58	15.3	7.52	18.30	9.43	0.19
3.0	7.40	26.30	40.6	3.59	20.52	8.84	0.27
4.0	7.14	27.01	49.7	2.80	21.11	8.62	0.34
5.0	6.81	27.59	44.0	3.28	21.61	8.32	0.41
6.0	6.78	27.80	41.7	3.50	21.78	8.29	0.47
7.0	6.92	28.05	51.6	2.64	21.96	8.45	0.53
8.0	7.00	28.20	59.6	2.07	22.07	8.54	0.59
9.0	6.98	28.24	63.3	1.83	22.10	8.52	0.65
10.0	7.12	28.42	63.0	1.85	22.22	8.67	0.70
12.0	7.01	28.49	61.6	1.92	22.30	8.57	0.82
13.0	6.88	28.53	50.7	2.72	22.34	8.45	0.87



STATION 19-5 CAST # 87829 DATE : 17:05 PDT ON 27/08/ 87
 WATER DEPTH 12.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 69 5.30 N LONG : 137 45.70 W

STATION 20-5 LAT 69 11.1 N LONG 137 50.6 W DATE 15:00 PDT ON 27/08/ 87

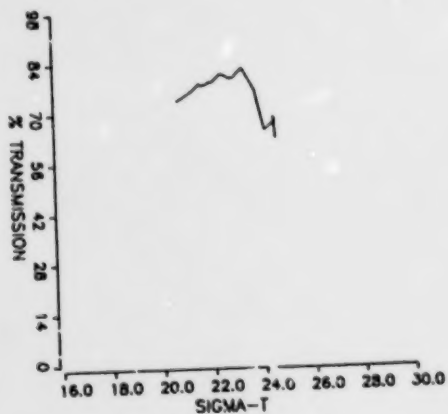
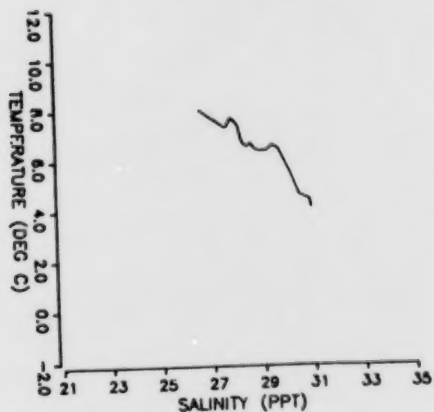
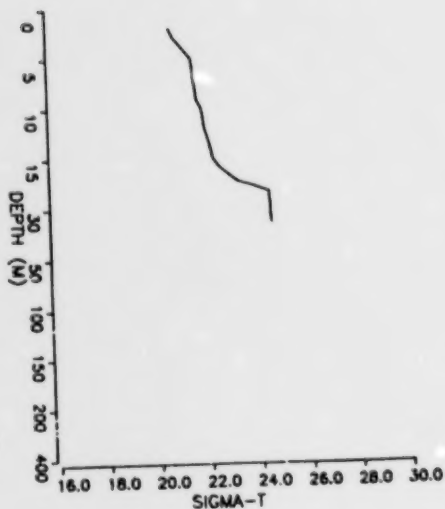
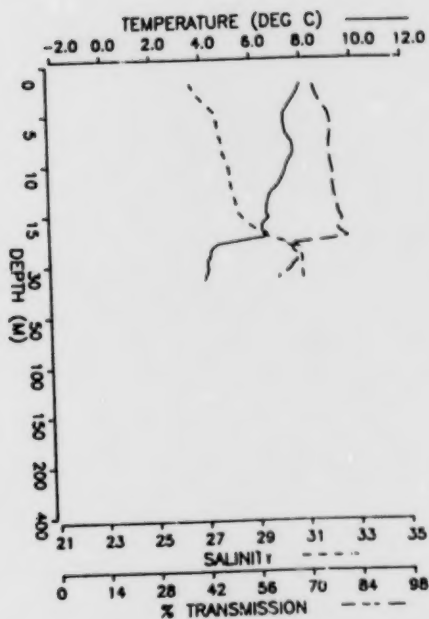
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	8.47	22.74	53.1	2.53	17.60	9.70	0.20
3.0	8.59	21.89	53.1	2.53	16.93	9.78	0.31
4.0	8.50	22.25	54.9	2.40	17.22	9.71	0.41
5.0	8.40	22.74	55.2	2.38	17.62	9.63	0.52
6.0	8.28	23.25	55.9	2.33	18.03	9.55	0.62
7.0	7.62	25.45	55.9	2.32	19.83	9.01	0.71
8.0	7.21	27.02	60.2	2.03	21.12	8.69	0.78
9.0	7.02	27.44	72.3	1.30	21.47	8.52	0.84
10.0	6.88	27.81	77.1	1.04	21.78	8.40	0.91
12.0	6.62	28.16	72.5	1.28	22.08	8.16	1.02
14.0	6.09	28.85	73.6	1.23	22.69	7.68	1.14
16.0	5.66	29.22	69.7	1.44	23.02	7.26	1.24
18.0	5.30	29.59	69.9	1.43	23.36	6.93	1.33
20.0	4.74	30.10	76.3	1.08	23.82	6.39	1.42
22.0	3.81	30.60	71.7	1.33	24.30	5.50	1.50
24.0	3.55	30.70	60.9	1.98	24.41	5.24	1.57
26.0	3.19	30.88	53.6	2.49	24.58	4.90	1.64
27.0	2.95	31.02	51.4	2.66	24.71	4.66	1.67



STATION 20-5 CAST # 87828 DATE : 15:00 PDT ON 27/08/ 87
 WATER DEPTH 27.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 69 11.10 N LONG : 137 50.60 W

STATION 21-5 LAT 69 16.6 N LONG 137 55.4 W DATE 13:30 PDT ON 27/08/ 87

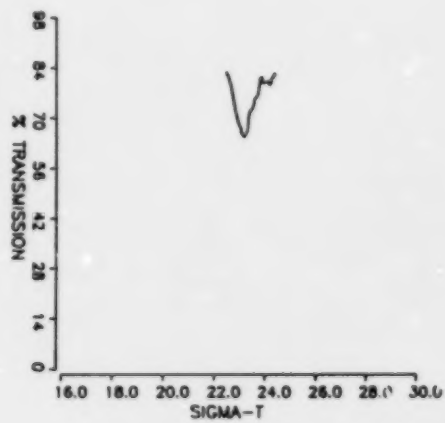
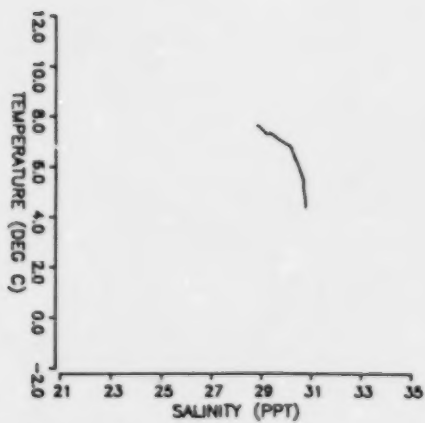
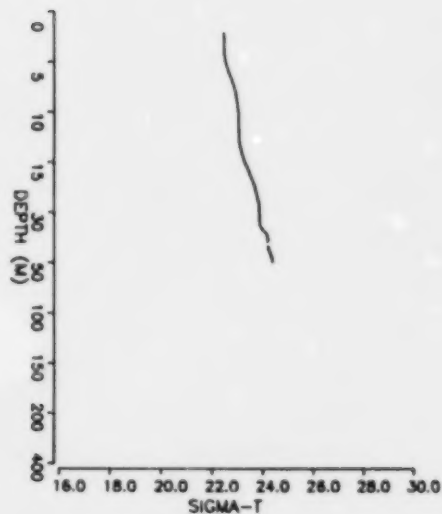
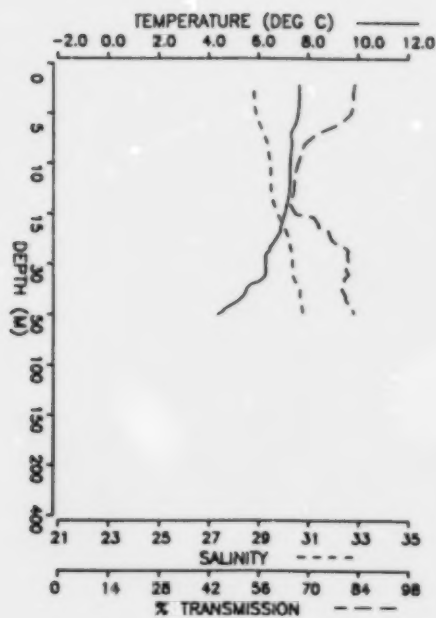
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	7.99	26.61	73.3	1.24	20.69	9.44	0.14
3.0	7.83	26.82	74.0	1.20	20.88	9.29	0.21
4.0	7.56	27.20	75.5	1.12	21.21	9.04	0.28
5.0	7.29	27.58	77.5	1.02	21.54	8.80	0.35
6.0	7.29	27.63	78.0	0.99	21.59	8.80	0.41
7.0	7.37	27.69	77.9	1.00	21.62	8.88	0.47
8.0	7.62	27.80	77.5	1.02	21.68	9.14	0.53
9.0	7.64	27.85	77.5	1.02	21.71	9.16	0.60
10.0	7.40	28.05	77.9	1.00	21.90	8.94	0.68
12.0	7.06	28.13	78.2	0.98	22.01	8.60	0.77
14.0	6.57	28.35	79.4	0.92	22.24	8.12	0.89
16.0	6.65	28.59	80.6	0.86	22.41	8.22	1.00
18.0	6.37	28.83	80.2	0.88	22.64	7.95	1.11
20.0	6.36	29.22	79.7	0.91	22.94	7.97	1.21
22.0	6.42	29.67	82.3	0.78	23.29	8.05	1.31
24.0	4.59	30.46	65.0	1.72	24.12	6.28	1.39
26.0	4.29	30.90	67.0	1.60	24.50	6.00	1.46
28.0	4.25	30.92	68.5	1.52	24.52	5.96	1.53
30.0	4.16	30.91	66.7	1.62	24.52	5.87	1.60
35.0	4.09	30.94	63.1	1.84	24.55	5.80	1.77
36.0	4.04	30.97	62.6	1.87	24.57	5.75	1.80



STATION 21-5 CAST # 87827 DATE : 13:30 PDT ON 27/08/ 87
 WATER DEPTH 33.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 69 16.60 N LONG : 137 55.40 W

STATION 23-5 LAT 69 23.2 N LONG 138 8.0 W DATE 08:25 PDT ON 27/08/ 87

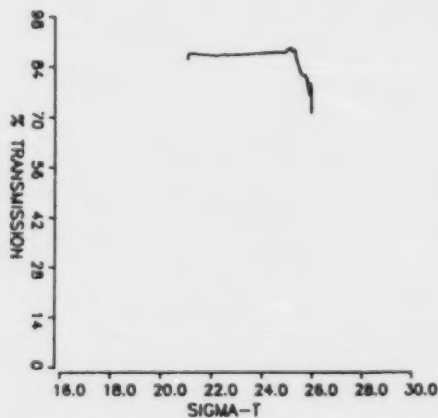
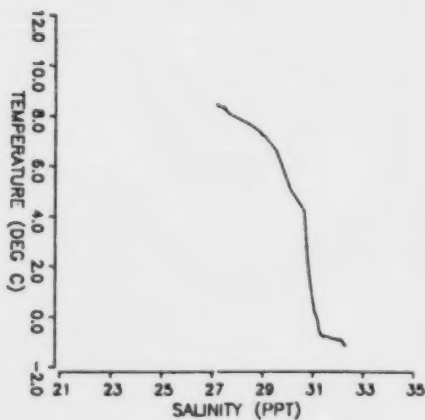
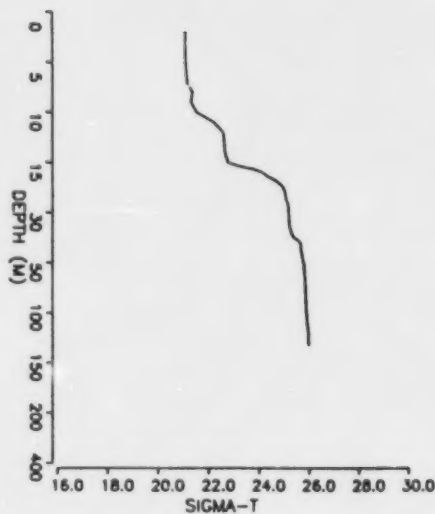
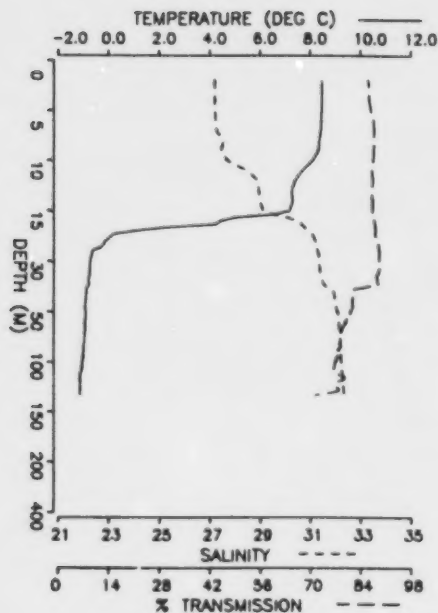
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	7.65	28.82	83.0	0.74	22.48	9.22	0.11
3.0	7.65	28.83	82.6	0.76	22.48	9.22	0.16
4.0	7.64	28.83	82.7	0.76	22.48	9.22	0.22
5.0	7.60	28.90	82.0	0.80	22.54	9.18	0.27
6.0	7.50	29.04	79.0	0.94	22.67	9.09	0.32
7.0	7.30	29.21	72.4	1.29	22.82	8.90	0.37
8.0	7.35	29.35	69.0	1.48	22.93	8.96	0.42
9.0	7.30	29.42	68.0	1.54	22.99	8.91	0.47
10.0	7.26	29.48	67.1	1.59	23.04	8.88	0.52
12.0	7.25	29.49	66.0	1.66	23.05	8.87	0.62
14.0	7.14	29.63	64.8	1.73	23.17	8.77	0.72
16.0	7.01	29.84	71.6	1.34	23.36	8.65	0.81
18.0	6.93	29.97	72.8	1.27	23.47	8.58	0.90
20.0	6.90	30.09	75.7	1.12	23.57	8.56	0.99
22.0	6.76	30.20	76.2	1.09	23.67	8.42	1.07
24.0	6.58	30.27	78.3	0.98	23.75	8.25	1.16
26.0	6.45	30.32	81.3	0.83	23.80	8.13	1.24
28.0	6.29	30.36	81.0	0.84	23.85	7.97	1.32
30.0	6.30	30.36	81.6	0.81	23.86	7.98	1.40
35.0	6.27	30.39	80.5	0.87	23.88	7.95	1.61
40.0	5.52	30.68	79.4	0.92	24.20	7.22	1.80
45.0	5.15	30.70	80.9	0.85	24.25	6.86	1.99
50.0	4.35	30.77	82.6	0.76	24.39	6.07	2.17



STATION 23-5 CAST # 87825 DATE : 08:25 PDT ON 27/08/ 87
 WATER DEPTH 66.0 M INSTRUMENT : GUILDLINE CTG
 LAT : 69 23 20 N LONG : 138 8.00 W

STATION 24-5 LAT 69 38.5 N LONG 138 19.0 W DATE 05:45 PDT ON 27/08/ 87

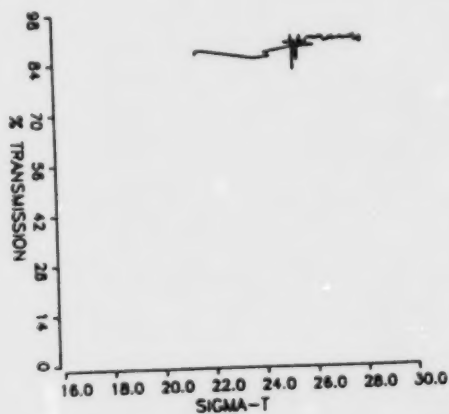
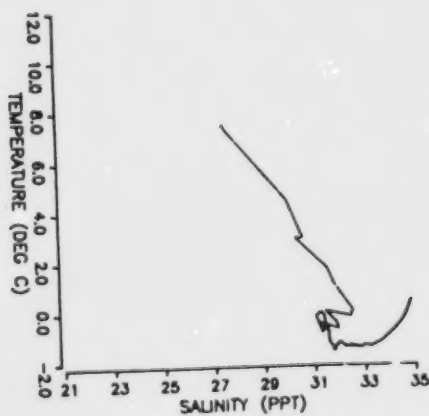
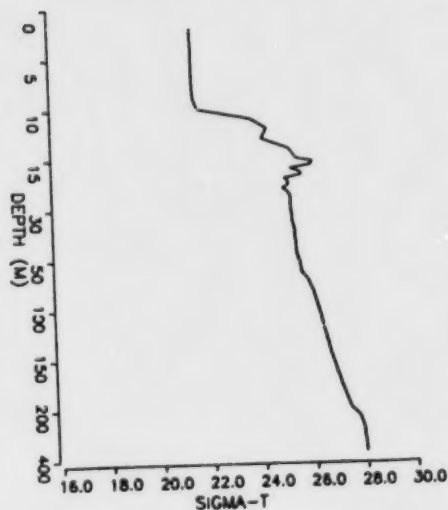
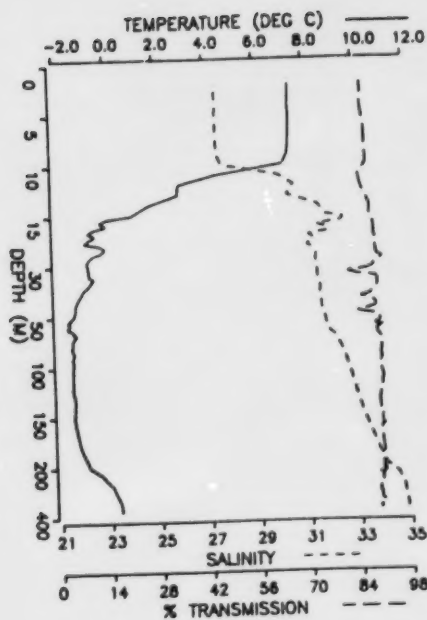
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	8.46	27.20	86.1	0.60	21.09	9.94	0.17
3.0	8.46	27.20	86.3	0.59	21.09	9.94	0.20
4.0	8.46	27.20	86.4	0.59	21.09	9.94	0.27
5.0	8.45	27.20	86.9	0.56	21.10	9.93	0.34
6.0	8.43	27.23	87.6	0.53	21.12	9.91	0.40
7.0	8.40	27.27	87.7	0.53	21.16	9.89	0.47
8.0	8.34	27.53	87.7	0.52	21.37	9.85	0.54
9.0	8.31	27.46	87.6	0.53	21.32	9.81	0.60
10.0	8.09	27.70	87.5	0.53	21.54	9.61	0.67
12.0	7.39	28.92	87.4	0.54	22.58	8.97	0.78
14.0	7.30	28.99	87.3	0.54	22.65	8.89	0.89
16.0	6.60	29.55	87.4	0.54	23.18	8.22	0.99
18.0	4.44	30.52	87.8	0.52	24.18	6.12	1.07
20.0	2.23	30.79	88.1	0.51	24.58	3.92	1.14
22.0	0.19	31.08	88.0	0.51	24.93	1.90	1.21
24.0	-0.13	31.20	88.8	0.48	25.04	1.59	1.27
26.0	-0.34	31.22	88.9	0.47	25.07	1.38	1.33
28.0	-0.67	31.33	89.1	0.46	25.17	1.06	1.38
30.0	-0.73	31.34	89.2	0.46	25.18	1.01	1.44
35.0	-0.77	31.39	88.9	0.47	25.22	0.97	1.58
40.0	-0.81	31.62	85.8	0.61	25.41	0.95	1.71
45.0	-0.90	31.96	81.7	0.81	25.68	0.88	1.83
50.0	-0.92	32.08	81.2	0.83	25.78	0.87	1.95
55.0	-0.92	32.10	80.4	0.87	25.80	0.88	2.06
60.0	-0.94	32.13	79.8	0.90	25.83	0.86	2.17
65.0	-0.94	32.14	79.0	0.94	25.84	0.67	2.27
70.0	-0.95	32.16	78.5	0.97	25.85	0.86	2.38
75.0	-0.96	32.17	78.5	0.97	25.86	0.65	2.49
80.0	-0.97	32.18	78.3	0.98	25.87	0.85	2.60
85.0	-1.00	32.18	78.6	0.97	25.87	0.83	2.70
90.0	-1.00	32.19	77.5	1.02	25.88	0.82	2.81
95.0	-1.03	32.21	77.5	1.02	25.89	0.81	2.92
100.0	-1.04	32.22	76.9	1.05	25.90	0.79	3.02
110.0	-1.10	32.25	77.3	1.03	25.93	0.75	3.23
120.0	-1.14	32.30	77.4	1.03	25.97	0.72	3.44
130.0	-1.14	32.32	76.6	1.07	25.99	0.73	3.64
133.0	-1.14	32.33	71.1	1.36	26.00	0.73	3.70



STATION 24-5 CAST # 87824 DATE : 05:45 PDT ON 27/08/ 87
 WATER DEPTH 137.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 69 38.50 N LONG : 138 19.00 W

STATION 26-5 LAT 70 11.0 N LONG 138 53.0 W DATE 19:50 PDT ON 26/08/ 87

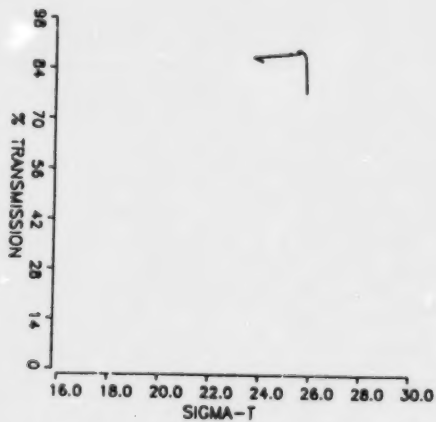
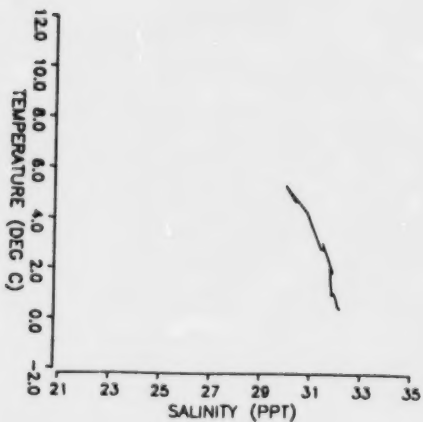
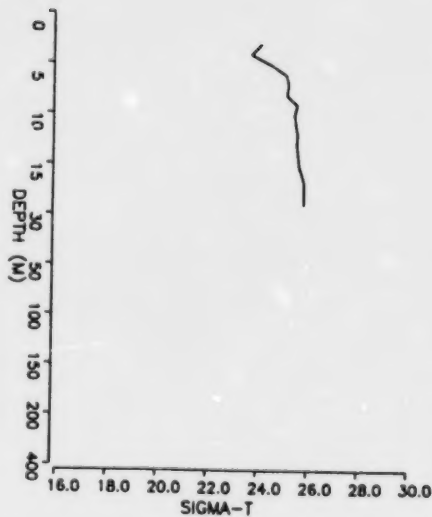
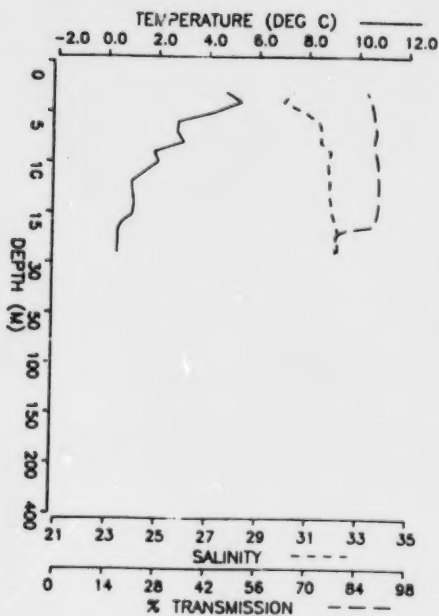
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	7.45	27.46	86.4	0.59	21.43	8.95	0.13
3.0	7.45	27.46	86.4	0.58	21.43	8.95	0.19
4.0	7.42	27.48	86.2	0.59	21.45	8.92	0.26
5.0	7.44	27.46	86.5	0.58	21.43	8.94	0.32
6.0	7.43	27.46	87.0	0.56	21.44	8.93	0.39
7.0	7.42	27.47	87.1	0.55	21.44	8.92	0.45
8.0	7.40	27.48	87.2	0.55	21.45	8.90	0.51
9.0	7.35	27.51	87.3	0.54	21.48	8.85	0.58
10.0	7.13	27.68	87.3	0.54	21.64	8.64	0.64
12.0	2.93	30.57	85.5	0.62	24.35	4.61	0.73
14.0	1.72	31.51	88.1	0.51	25.19	3.45	0.80
16.0	0.01	32.52	88.4	0.49	26.10	1.81	0.85
18.0	-0.03	31.44	89.1	0.46	25.23	1.70	0.89
20.0	-0.75	31.94	89.2	0.46	25.66	1.01	0.94
22.0	-0.71	31.30	89.4	0.45	25.14	1.01	1.00
24.0	-0.21	31.00	89.3	0.45	24.93	1.50	1.06
26.0	-0.24	31.39	89.6	0.44	25.20	1.50	1.11
28.0	-0.73	31.38	91.2	0.37	25.21	1.01	1.17
30.0	-0.75	31.38	89.0	0.47	25.22	0.99	1.22
35.0	-0.54	31.45	89.3	0.45	25.26	1.20	1.36
40.0	-1.00	31.54	88.8	0.48	25.35	0.75	1.49
45.0	-1.27	31.58	88.8	0.48	25.39	0.50	1.63
50.0	-1.37	31.67	88.5	0.49	25.46	0.40	1.75
55.0	-1.61	31.75	90.4	0.40	25.54	0.17	1.88
60.0	-1.61	31.81	88.9	0.47	25.58	0.18	2.00
65.0	-1.36	31.88	89.1	0.46	25.64	0.43	2.12
70.0	-1.35	32.08	89.8	0.43	25.80	0.45	2.24
75.0	-1.44	32.21	90.5	0.40	25.90	0.37	2.34
80.0	-1.46	32.31	90.6	0.39	25.99	0.37	2.45
85.0	-1.42	32.40	90.6	0.39	26.06	0.42	2.55
90.0	-1.43	32.46	90.4	0.40	26.11	0.41	2.64
95.0	-1.43	32.53	90.3	0.41	26.17	0.42	2.74
100.0	-1.44	32.61	90.4	0.40	26.23	0.42	2.83
110.0	-1.46	32.72	90.8	0.39	26.32	0.41	3.00
120.0	-1.46	32.82	90.6	0.40	26.40	0.42	3.17
130.0	-1.40	32.95	89.9	0.43	26.50	0.50	3.33
140.0	-1.42	33.06	89.8	0.43	26.60	0.49	3.47
150.0	-1.45	33.21	90.7	0.39	26.72	0.48	3.61
175.0	-1.26	33.59	90.3	0.41	27.02	0.71	3.91
200.0	-0.88	34.06	90.4	0.40	27.39	1.14	4.12
225.0	-0.49	34.40	90.8	0.39	27.65	1.56	4.26
250.0	-0.24	34.58	90.0	0.42	27.78	1.84	4.35
300.0	0.13	34.74	89.3	0.45	27.89	2.25	4.47
350.0	0.35	34.82	90.3	0.41	27.94	2.52	4.56
376.0	0.38	34.85	89.3	0.45	27.97	2.57	4.60



STATION 26-5 CAST # 87823 DATE : 19:50 PDT ON 26/08/ 87
 WATER DEPTH 400.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 11.00 N LONG : 138 53.00 W

STATION	LAT	LONG	DATE
31-5	70 28.0 N	131 10.4 W	00:55 PDT ON 21/08/ 87

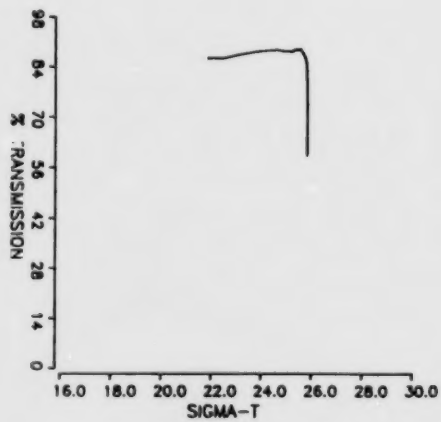
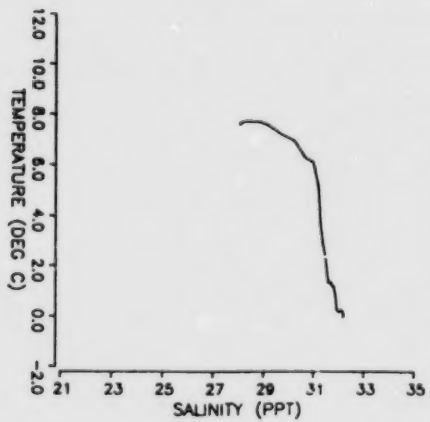
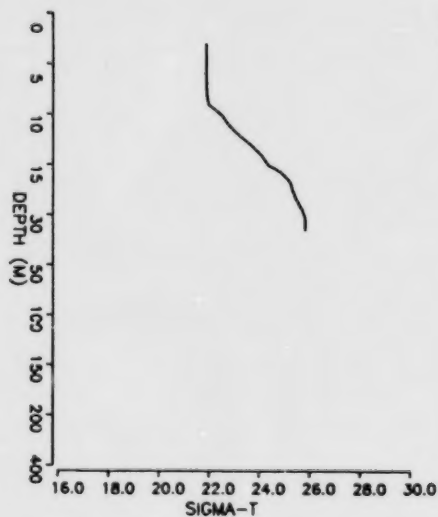
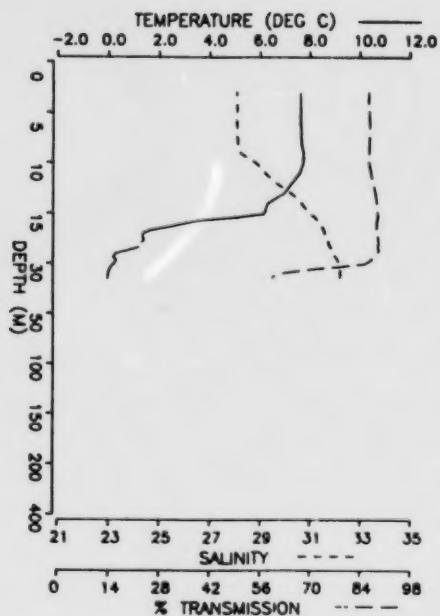
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	4.67	30.36	88.2	0.59	24.03	6.33	0.12
4.0	5.30	29.97	87.4	0.54	23.66	6.94	0.16
5.0	4.26	30.83	88.0	0.51	24.45	5.94	0.20
6.0	2.79	31.40	88.3	0.50	25.03	4.51	0.23
7.0	2.76	31.53	88.8	0.47	25.13	4.49	0.26
8.0	3.01	31.47	88.2	0.50	25.07	4.74	0.29
9.0	1.84	31.89	88.6	0.46	25.49	3.59	0.31
10.0	2.01	31.77	89.2	0.46	25.38	3.76	0.34
12.0	0.94	31.85	89.5	0.44	25.51	2.69	0.39
14.0	1.04	31.88	89.5	0.45	25.54	2.80	0.44
16.0	0.92	31.97	88.9	0.47	25.61	2.68	0.49
18.0	0.57	32.05	88.3	0.50	25.70	2.34	0.54
20.0	0.43	32.14	80.6	0.86	25.78	2.20	0.58
22.0	0.41	32.15	77.5	1.02	25.79	2.19	0.63
24.0	0.41	32.16	77.9	1.00	25.79	2.19	0.67
26.0	0.41	32.16	77.6	1.02	25.80	2.18	0.71
27.0	0.40	32.16	77.5	1.02	25.80	2.18	0.74



STATION 31-5 CAST # 87816 DATE : 00:55 PDT ON 21/08/ 87
 WATER DEPTH 37.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 28.00 N LONG : 131 10.40 W

STATION 32-5 LAT 70 38.5 N LONG 151 22.1 W DATE 23:00 PDT ON 20/08/ 87

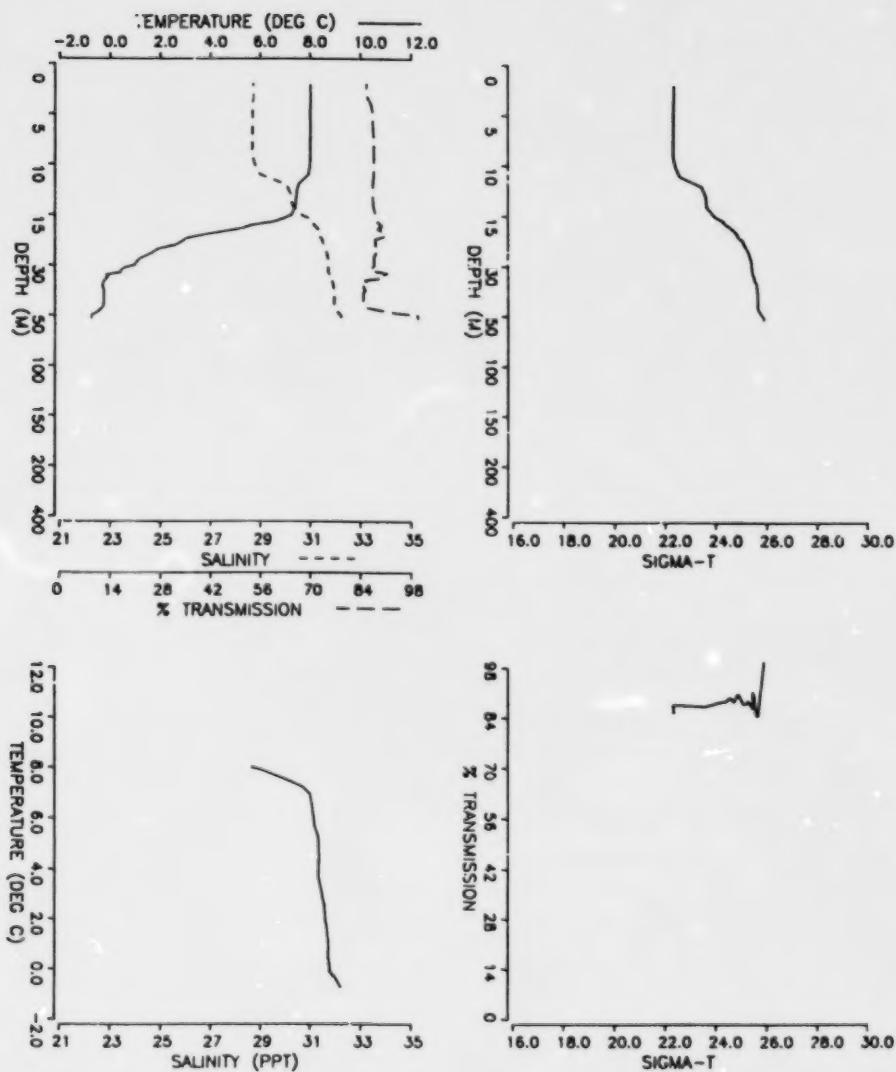
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	7.62	28.07	86.5	0.58	21.89	9.15	0.18
4.0	7.62	28.08	86.4	0.59	21.89	9.16	0.24
5.0	7.62	28.08	86.5	0.58	21.89	9.16	0.30
6.0	7.63	28.07	86.7	0.57	21.89	9.16	0.36
7.0	7.65	28.09	86.7	0.57	21.90	9.18	0.42
8.0	7.66	28.10	86.6	0.57	21.91	9.19	0.48
9.0	7.74	28.23	86.5	0.58	21.99	9.28	0.54
10.0	7.72	28.66	86.5	0.58	22.49	9.30	0.59
12.0	7.28	29.66	87.6	0.53	23.18	8.90	0.70
14.0	6.30	30.68	88.7	0.48	24.11	7.99	0.78
16.0	5.14	31.21	88.9	0.47	24.66	6.86	0.85
18.0	2.93	31.38	88.6	0.49	25.01	4.66	0.91
20.0	1.68	31.56	88.4	0.49	25.24	3.42	0.97
22.0	1.34	31.62	88.9	0.47	25.31	3.08	1.03
24.0	1.22	31.76	89.1	0.46	25.42	2.97	1.08
26.0	0.75	31.90	89.3	0.45	25.57	2.51	1.13
28.0	0.19	32.04	87.6	0.53	25.71	1.96	1.18
30.0	0.22	32.17	85.2	0.64	25.81	2.00	1.22
35.0	-0.02	32.20	59.8	2.06	25.85	1.77	1.33
36.0	-0.03	32.20	59.3	2.09	25.85	1.76	1.35



STATION 32-5 CAST # 87815 DATE : 23:00 PDT ON 20/08/ 87
 WATER DEPTH 38.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 38.50 N LONG : 131 22.10 W

STATION 33-5 LAT 70 54.4 N LONG 131 39.6 W DATE 09:25 PDT ON 20/08/ 87

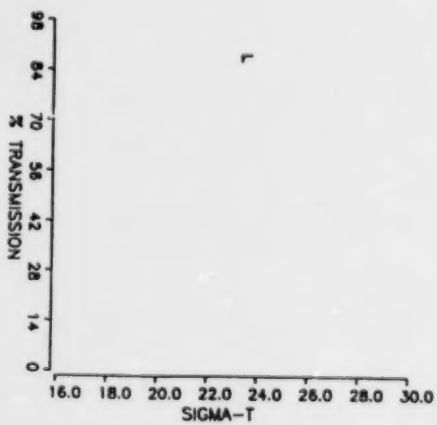
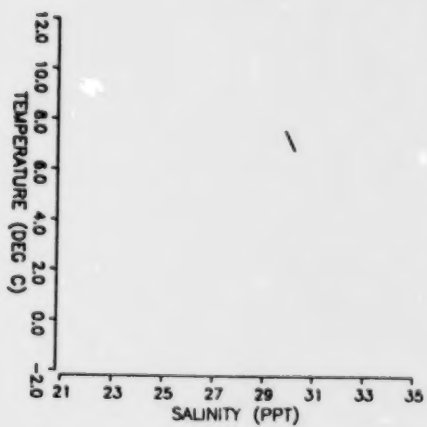
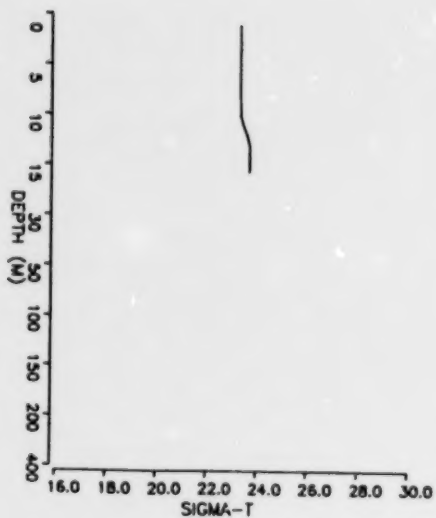
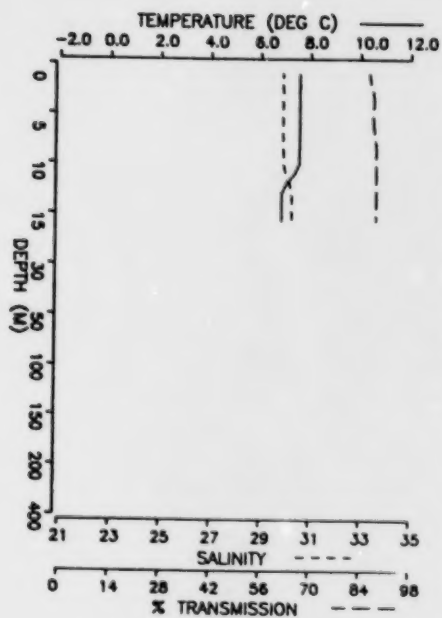
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-T ₂	DYN HT
2.0	8.01	28.73	85.7	0.62	22.35	9.58	0.11
3.0	8.02	28.72	85.5	0.63	22.35	9.59	0.17
4.0	8.02	28.71	86.9	0.56	22.34	9.59	0.22
5.0	8.01	28.70	87.4	0.54	22.33	9.58	0.28
6.0	8.01	28.69	87.4	0.54	22.32	9.58	0.33
7.0	8.01	28.69	87.5	0.53	22.32	9.58	0.39
8.0	8.01	28.68	87.7	0.52	22.32	9.58	0.44
9.0	8.01	28.68	87.7	0.52	22.32	9.58	0.50
10.0	7.99	28.78	87.7	0.52	22.39	9.57	0.55
12.0	7.54	30.03	87.4	0.54	23.44	9.18	0.66
14.0	7.42	30.28	87.4	0.54	23.65	9.09	0.74
16.0	6.96	31.00	88.7	0.48	24.27	8.66	0.82
18.0	5.69	31.18	90.0	0.42	24.57	7.41	0.90
20.0	4.49	31.36	90.6	0.39	24.84	6.22	0.96
22.0	3.01	31.48	88.1	0.51	25.07	4.75	1.02
24.0	2.57	31.57	88.1	0.51	25.18	4.31	1.08
26.0	1.73	31.66	88.4	0.49	25.32	3.48	1.13
28.0	1.19	31.71	87.8	0.52	25.39	2.94	1.19
30.0	0.98	31.74	87.8	0.52	25.43	2.73	1.24
35.0	-0.08	31.77	90.1	0.42	25.50	1.69	1.36
40.0	-0.23	31.94	85.4	0.63	25.65	1.54	1.48
45.0	-0.25	31.96	84.8	0.66	25.66	1.54	1.60
50.0	-0.72	32.22	99.8	0.01	25.89	1.08	1.71
54.0	-0.72	32.22	99.8	0.01	25.89	1.08	1.80



STATION 33-5 CAST # 87814 DATE : 09:25 PDT ON 20/08/ 87
 WATER DEPTH 56.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 54.40 N LONG : 131 39.60 W

STATION 34-5 LAT 71 9.0 N LONG 132 0.1 W DATE 21:50 PDT ON 19/08/ 87

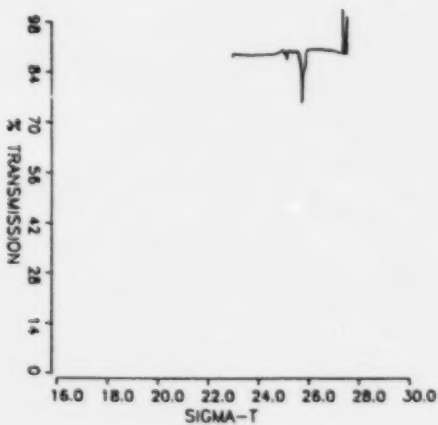
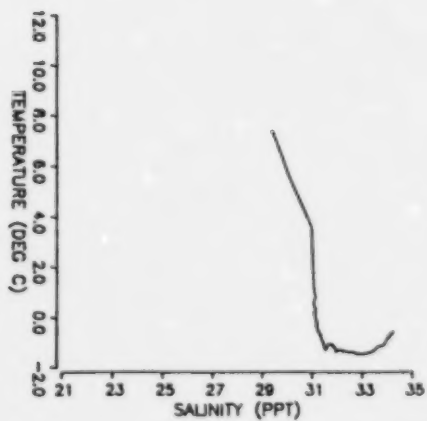
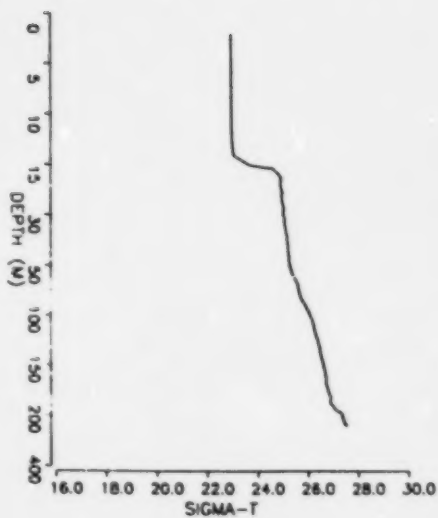
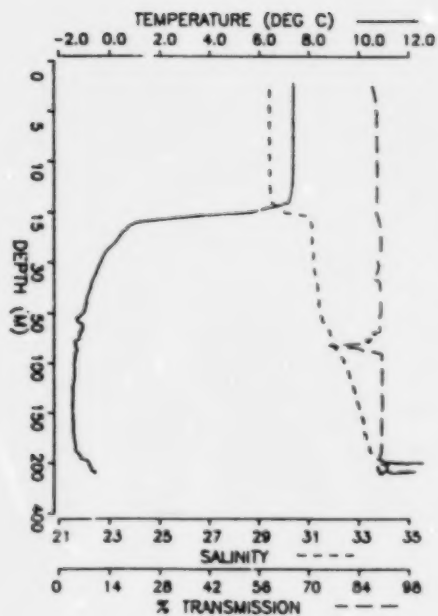
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.56	29.88	86.4	0.59	23.32	9.19	0.05
2.0	7.55	29.88	86.7	0.57	23.32	9.19	0.09
3.0	7.55	29.89	87.5	0.54	23.32	9.18	0.14
4.0	7.56	29.88	87.6	0.53	23.32	9.19	0.18
5.0	7.56	29.88	87.3	0.54	23.32	9.19	0.23
6.0	7.56	29.88	87.5	0.53	23.32	9.19	0.28
7.0	7.56	29.88	87.8	0.52	23.32	9.19	0.32
8.0	7.56	29.89	88.3	0.50	23.32	9.20	0.37
9.0	7.54	29.90	88.3	0.50	23.33	9.18	0.41
10.0	7.55	29.90	88.3	0.50	23.33	9.19	0.46
12.0	7.03	30.14	88.3	0.50	23.59	8.68	0.55
14.0	6.83	30.24	88.3	0.50	23.70	8.49	0.63
16.0	6.83	30.24	88.3	0.50	23.70	8.50	0.72
17.0	6.83	30.24	88.3	0.50	23.70	8.50	0.76



STATION 34-5 CAST # 87813 DATE : 21:50 PDT ON 19/08/ 87
 WATER DEPTH 74.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 71 9.00 N LONG : 132 0.10 W

STATION LAT LONG DATE
 47-5 70 44.3 N 127 17.0 W 16:55 PDT ON 22/08/ 87

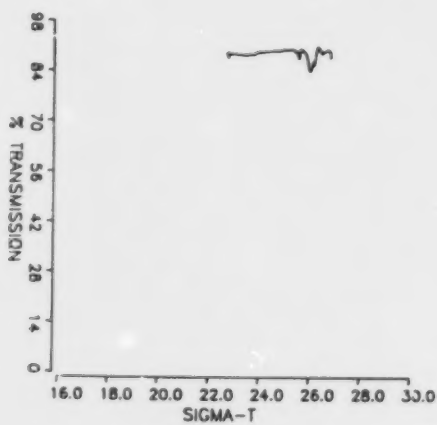
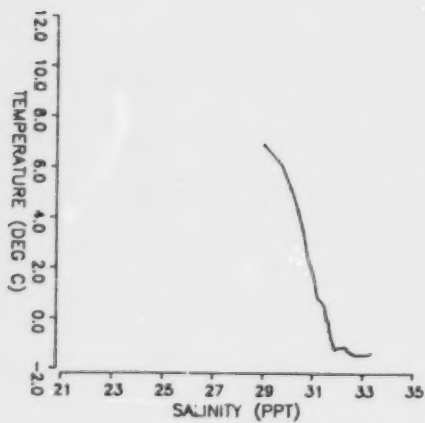
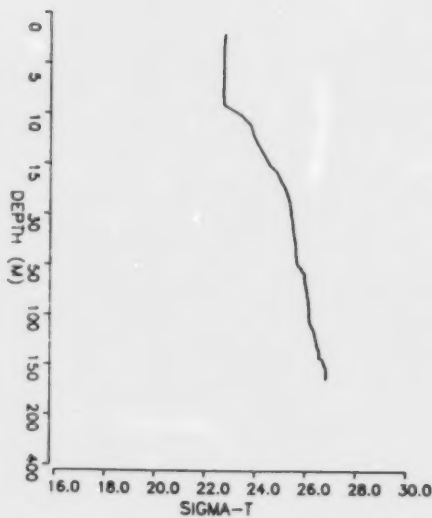
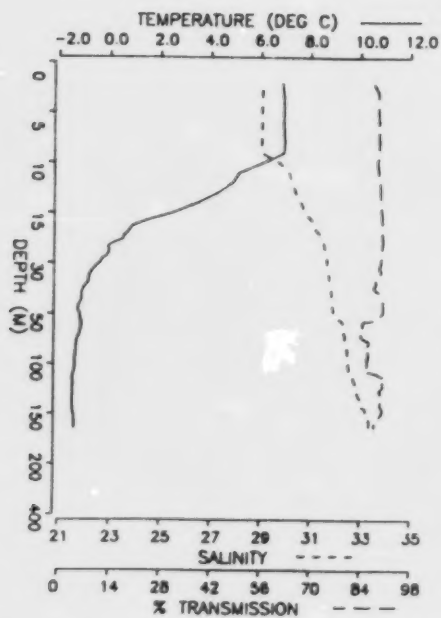
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	7.37	29.41	87.6	0.53	22.97	8.98	0.10
3.0	7.37	29.41	88.1	0.51	22.97	8.98	0.15
4.0	7.37	29.41	88.7	0.48	22.97	8.98	0.20
5.0	7.37	29.41	89.0	0.47	22.97	8.98	0.25
6.0	7.37	29.41	88.9	0.47	22.97	8.98	0.30
7.0	7.37	29.41	89.0	0.47	22.98	8.98	0.35
8.0	7.37	29.41	89.1	0.46	22.98	8.98	0.39
9.0	7.37	29.41	89.1	0.46	22.98	8.98	0.44
10.0	7.36	29.42	89.1	0.46	22.98	8.97	0.49
12.0	7.34	29.43	89.1	0.46	22.99	8.96	0.59
14.0	7.19	29.50	89.1	0.46	23.06	8.81	0.69
16.0	3.60	30.98	89.2	0.46	24.63	5.30	0.77
18.0	1.12	31.08	89.8	0.43	24.89	2.83	0.84
20.0	0.70	31.08	90.1	0.42	24.91	2.42	0.90
22.0	0.43	31.09	90.2	0.41	24.93	2.14	0.96
24.0	0.24	31.12	90.2	0.41	24.96	1.96	1.02
26.0	-0.03	31.14	90.1	0.42	25.00	1.69	1.08
28.0	-0.23	31.20	89.6	0.44	25.05	1.49	1.14
30.0	-0.35	31.19	89.1	0.46	25.04	1.38	1.20
35.0	-0.56	31.27	88.9	0.47	25.12	1.17	1.34
40.0	-0.75	31.35	89.9	0.42	25.19	1.00	1.48
45.0	-0.91	31.40	90.1	0.42	25.23	0.84	1.62
50.0	-1.03	31.45	90.1	0.42	25.28	0.72	1.76
55.0	-1.32	31.53	89.5	0.44	25.35	0.44	1.89
60.0	-1.19	31.61	89.7	0.43	25.41	0.58	2.02
65.0	-1.12	31.78	90.0	0.42	25.55	0.67	2.15
70.0	-1.17	31.85	87.8	0.52	25.60	0.62	2.27
75.0	-1.20	31.90	87.6	0.53	25.65	0.61	2.39
80.0	-1.39	31.94	86.1	0.60	25.69	0.42	2.50
85.0	-1.31	32.06	83.8	0.71	25.78	0.51	2.62
90.0	-1.36	32.23	90.1	0.42	25.92	0.47	2.73
95.0	-1.38	32.35	90.5	0.40	26.01	0.4	2.83
100.0	-1.39	32.45	90.5	0.40	26.10	0.	2.93
110.0	-1.39	32.60	90.5	0.40	26.22	0.48	3.11
120.0	-1.44	32.72	90.5	0.40	26.32	0.44	3.29
130.0	-1.45	32.86	90.5	0.40	26.43	0.44	3.45
140.0	-1.46	32.95	90.4	0.40	26.51	0.44	3.61
150.0	-1.45	33.08	90.3	0.41	26.61	0.47	3.75
175.0	-1.41	33.30	90.3	0.41	26.79	0.54	4.09
200.0	-0.83	34.02	101.9	-0.08	27.36	1.18	4.35
225.0	-0.73	34.11	89.3	0.45	27.42	1.31	4.52
243.0	-0.58	34.23	89.4	0.45	27.51	1.48	4.63



STATION 47-5 CAST # 87817 DATE : 16:55 PDT ON 22/08/ 87
 WATER DEPTH 225.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 44.30 N LONG : 127 17.00 W

STATION LAT LONG DATE
48-5 71 27.7 N 128 33.8 W 13:40 PDT ON 24/08/ 87

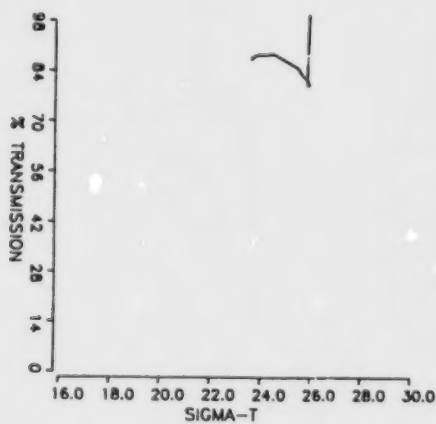
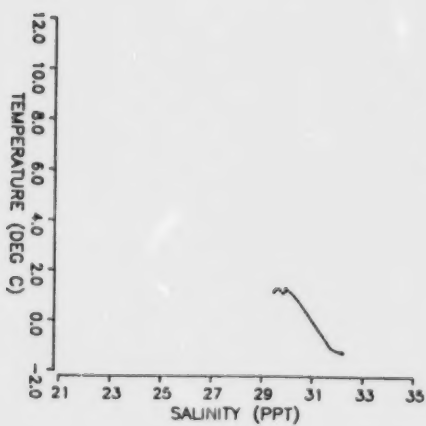
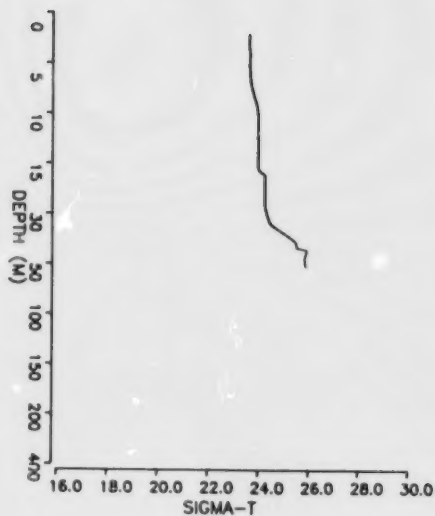
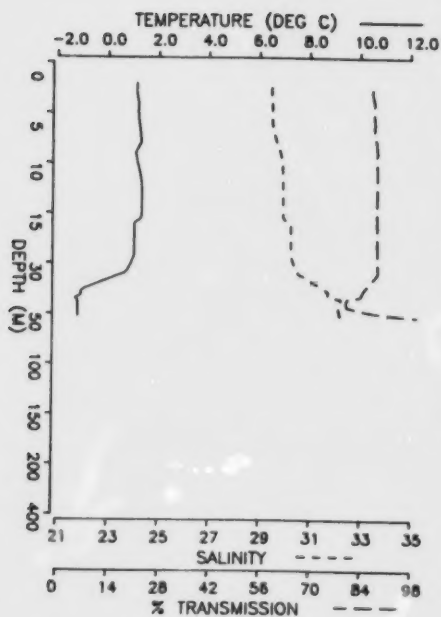
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.85	29.07	87.5	0.53	22.77	8.44	0.10
3.0	6.89	29.04	88.9	0.47	22.74	8.47	0.15
4.0	6.91	29.03	88.9	0.47	22.73	8.50	0.21
5.0	6.91	29.03	88.9	0.47	22.73	8.49	0.26
6.0	6.91	29.03	89.0	0.47	22.73	8.49	0.31
7.0	6.92	29.02	89.0	0.46	22.72	8.51	0.36
8.0	6.94	29.01	89.2	0.47	22.71	8.53	0.41
9.0	6.91	29.04	89.1	0.46	22.74	8.50	0.46
10.0	6.10	29.75	88.6	0.48	23.40	7.73	0.51
12.0	4.86	30.23	89.4	0.45	23.91	6.51	0.60
14.0	3.43	30.62	89.6	0.44	24.36	5.11	0.67
16.0	2.05	30.93	89.9	0.43	24.71	3.75	0.74
18.0	1.21	31.12	90.1	0.42	24.91	2.92	0.80
20.0	0.79	31.24	90.1	0.42	25.03	2.52	0.86
22.0	0.55	31.43	90.1	0.42	25.20	2.29	0.92
24.0	0.16	31.52	90.2	0.41	25.29	1.90	0.98
26.0	-0.03	31.62	90.1	0.42	25.38	1.72	1.03
28.0	-0.14	31.65	89.9	0.42	25.41	1.61	1.08
30.0	-0.39	31.68	89.6	0.44	25.43	1.37	1.13
35.0	-0.80	31.75	89.4	0.45	25.51	0.96	1.26
40.0	-1.04	31.83	87.8	0.52	25.58	0.73	1.38
45.0	-1.11	31.86	90.3	0.41	25.61	0.67	1.50
50.0	-1.17	32.00	90.1	0.42	25.73	0.62	1.62
55.0	-1.17	32.16	89.0	0.47	25.85	0.63	1.73
60.0	-1.12	32.31	84.5	0.67	25.97	0.69	1.83
65.0	-1.13	32.31	84.7	0.66	25.97	0.69	1.93
70.0	-1.18	32.35	84.1	0.69	26.01	0.65	2.03
75.0	-1.27	32.40	85.1	0.65	26.06	0.56	2.13
80.0	-1.30	32.43	86.1	0.60	26.08	0.54	2.23
85.0	-1.33	32.48	86.3	0.59	26.12	0.51	2.33
90.0	-1.34	32.50	86.3	0.59	26.13	0.51	2.42
95.0	-1.35	32.52	86.0	0.61	26.16	0.50	2.51
100.0	-1.35	32.52	85.9	0.61	26.15	0.50	2.61
110.0	-1.42	32.62	88.9	0.47	26.24	0.45	2.79
120.0	-1.43	32.80	90.2	0.41	26.39	0.45	2.86
130.0	-1.44	32.90	89.5	0.44	26.47	0.45	3.12
140.0	-1.46	33.00	89.5	0.44	26.55	0.45	3.27
150.0	-1.40	33.28	89.9	0.42	26.78	0.53	3.41
164.0	-1.38	33.34	87.9	0.51	26.82	0.57	3.58



STATION 48-5 CAST # 87819 DATE : 13:40 PM ON 24/08/ 87
 WATER DEPTH 166.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 71 27.70 N LONG : 128 33.80 W

STATION 9-8 LAT 70 41.8 N LONG 134 8.0 W DATE 19:25 PDT ON 01/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	1.12	29.48	87.5	0.53	23.60	2.73	0.09
3.0	1.12	29.48	87.3	0.55	23.60	2.73	0.13
4.0	1.18	29.52	87.9	0.52	23.63	2.79	0.17
5.0	1.17	29.51	87.8	0.52	23.63	2.79	0.22
6.0	1.21	29.52	88.0	0.51	23.63	2.83	0.26
7.0	1.27	29.59	87.9	0.51	23.68	2.89	0.30
8.0	1.30	29.71	88.5	0.49	23.77	2.93	0.34
9.0	1.08	29.85	88.7	0.48	23.91	2.72	0.38
10.0	1.15	29.93	88.6	0.48	23.96	2.79	0.42
12.0	1.31	29.94	88.7	0.48	23.96	2.96	0.50
14.0	1.33	29.95	88.7	0.48	23.97	2.97	0.58
16.0	1.33	29.95	88.7	0.48	23.97	2.98	0.66
18.0	1.04	30.27	88.7	0.48	24.24	2.70	0.74
20.0	1.04	30.27	88.7	0.48	24.24	2.71	0.81
22.0	1.04	30.27	88.7	0.48	24.24	2.71	0.89
24.0	1.04	30.27	88.7	0.48	24.24	2.71	0.96
26.0	1.04	30.27	88.7	0.48	24.24	2.71	1.04
28.0	1.02	30.28	88.8	0.48	24.25	2.69	1.11
30.0	0.91	30.37	88.8	0.47	24.33	2.59	1.18
35.0	0.38	30.74	88.1	0.51	24.65	2.09	1.36
40.0	-0.86	31.59	85.2	0.64	25.38	0.89	1.51
45.0	-1.20	32.22	79.9	0.90	25.90	0.60	1.63
50.0	-1.19	32.16	90.4	0.40	25.86	0.61	1.74
53.0	-1.19	32.21	99.8	0.01	25.90	0.62	1.80



STATION 9-6 CAST # 37935 DATE : 19:25 PDT ON 01/09/ 87
 WATER DEPTH 66.0 M INSTRUMENT : GUILDLINE CTD
 LAT : 70 41.80 N LONG : 134 8.00 W

7 APPENDIX B; APPLIED MICROSYSTEM LTD. CTTD DATA; TABLES AND PLOTS

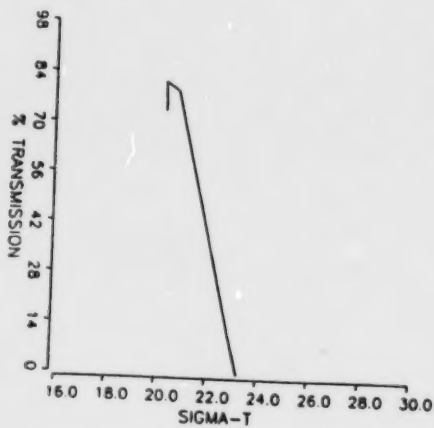
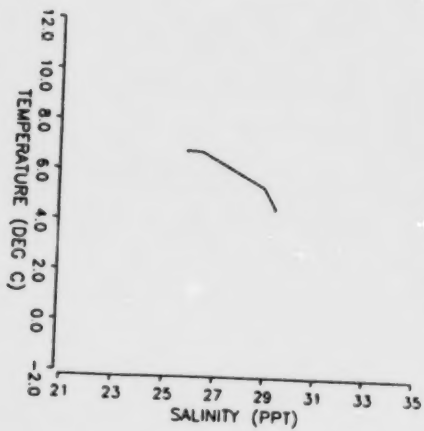
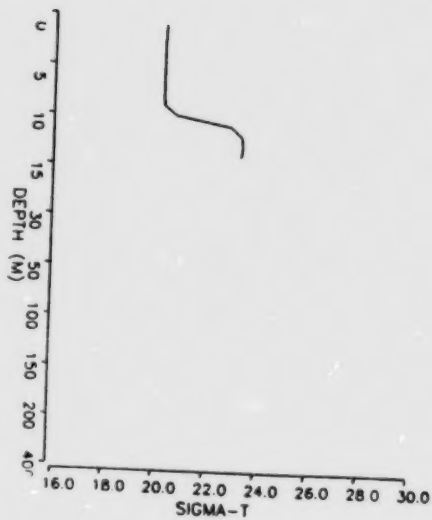
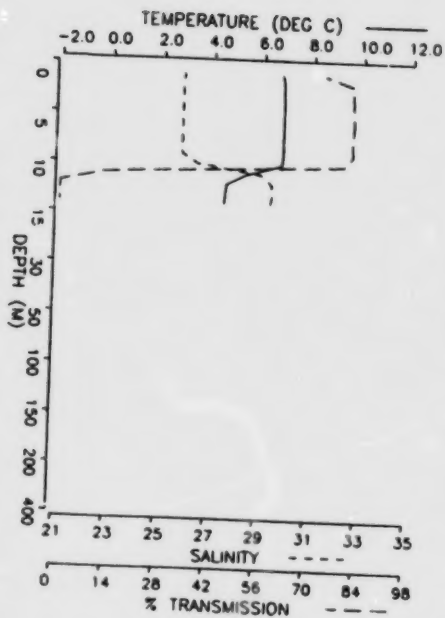
Units and abbreviations used in the computer listings which are included in the following appendix are summarized below.

Measurement	Abbreviation	Units
DEPTH	DEPTH	METRES (M)
TEMPERATURE	TEMP	DEGREES CENTIGRADE (DEG C)
SALINITY	SALN	PARTS PER THOUSAND (PPT)
TRANSMISSION	TRNS	PERCENT (%)
LIGHT ATTENUATION	ATTN	1/METRE (1/M)
DENSITY [†]	SIGT	KILOGRAM/METRE ³ (KG/M ³)
DEPARTURE FROM FREEZING	T-Tf	CENTIGRADE DEGREES (DEG C)
DYNAMIC HEIGHT ANOMALY	DYN HT	METRES (M)

[†] The quantity reported for density is actually $\gamma(5,0)$ [UNESCO, 1987].

STATION LAT LONG DATE
 13-5 69 49.0 N 135 50.1 W 11:10 PDT ON 30/08/ 87

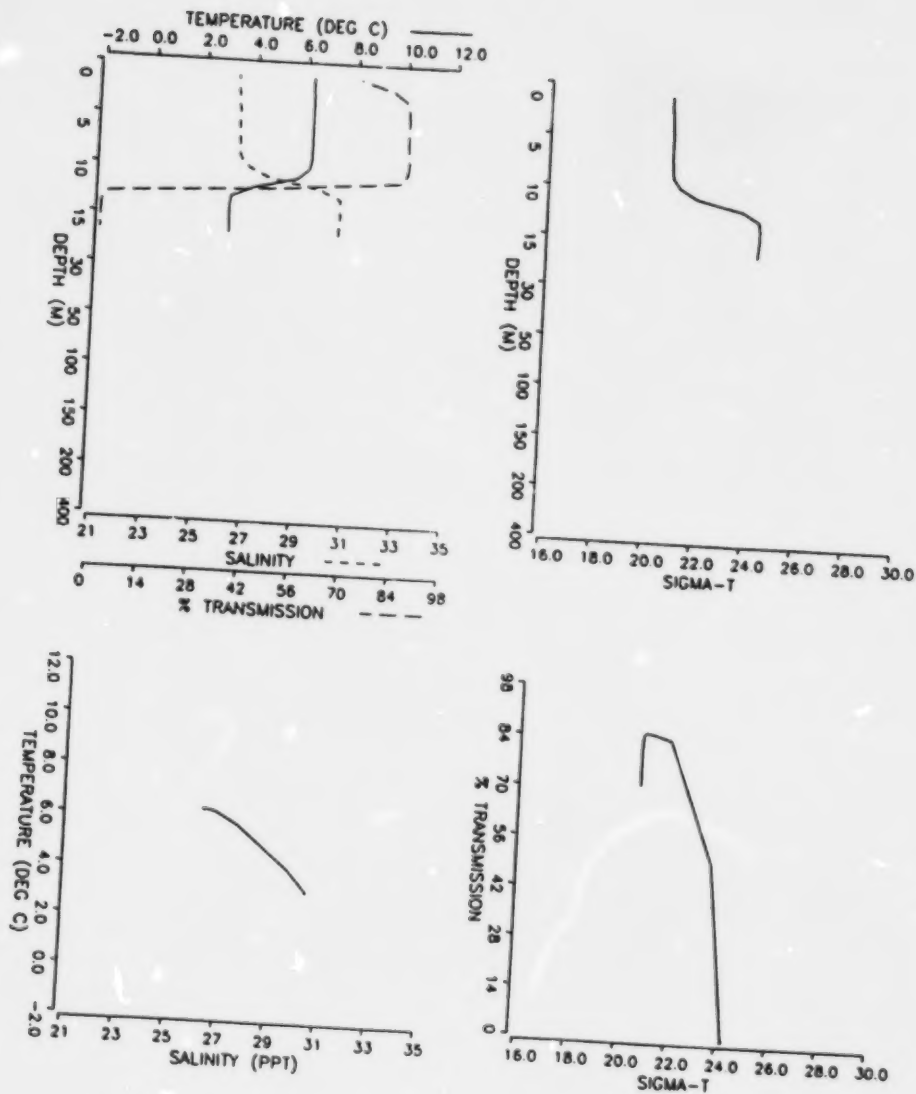
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.72	25.80	73.2	1.25	20.21	8.13	0.08
2.0	6.79	25.77	81.3	0.83	20.18	8.19	0.15
3.0	6.79	25.76	81.0	0.84	20.18	8.19	0.23
4.0	6.79	25.76	81.2	0.83	20.18	8.20	0.30
5.0	6.80	25.76	81.5	0.82	20.17	8.20	0.38
6.0	6.80	25.76	81.5	0.82	20.17	8.20	0.46
7.0	6.79	25.77	81.4	0.82	20.18	8.20	0.53
8.0	6.80	25.77	81.2	0.83	20.18	8.21	0.61
9.0	6.81	25.77	81.3	0.83	20.18	8.21	0.69
10.0	6.76	26.40	78.9	0.95	20.68	8.20	0.76
12.0	4.58	29.36	0.0	36.84	23.25	6.19	0.87
14.0	4.50	29.33	0.0	36.84	23.23	6.11	0.96



STATION 13-5 CAST # 87001 DATE : 11:10 ON 30/08/ 87
 WATER DEPTH 13.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 49.00 N LONG : 135 50.10 W

STATION 14-5 LAT 69 55.0 N 135 LONG 56.2 W 11:10 PDT ON DATE 30/08/ 87

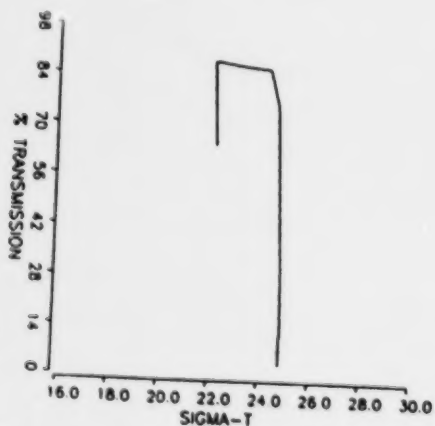
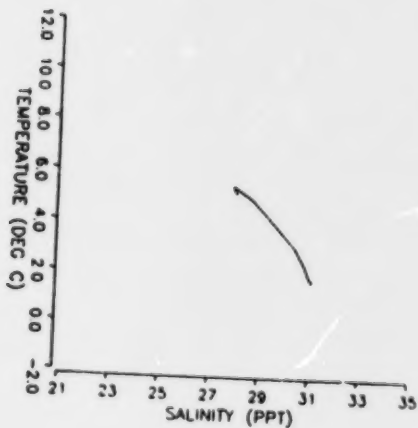
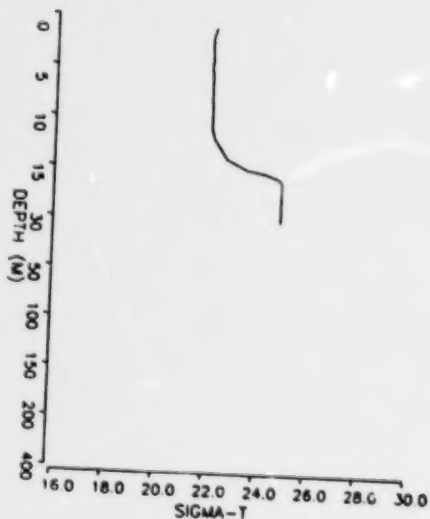
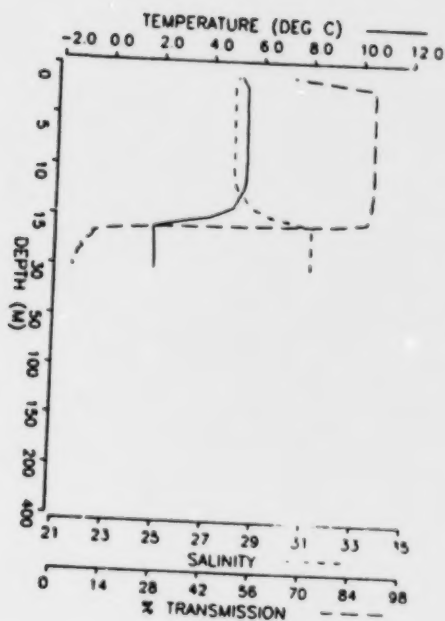
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.25	26.26	70.8	1.38	20.63	7.68	0.07
2.0	6.25	26.27	80.2	0.88	20.64	7.68	0.14
3.0	6.26	26.32	84.0	0.70	20.68	7.70	0.22
4.0	6.26	26.34	84.7	0.67	20.69	7.71	0.29
5.0	6.27	26.35	84.7	0.66	20.70	7.71	0.36
6.0	6.27	26.35	84.8	0.66	20.70	7.71	0.43
7.0	6.27	26.36	84.8	0.66	20.71	7.71	0.50
8.0	6.27	26.39	84.9	0.66	20.73	7.71	0.57
9.0	6.27	26.42	85.2	0.64	20.76	7.71	0.64
10.0	6.20	26.78	85.0	0.65	21.04	7.66	0.71
12.0	4.00	29.88	49.9	2.78	23.56	5.63	0.83
14.0	3.06	30.49	0.0	50.33	24.28	4.73	0.91
16.0	3.07	30.48	0.0	36.84	24.27	4.74	0.98
18.0	3.08	30.46	0.0	36.84	24.25	4.76	1.05
20.0	3.09	30.43	0.0	36.84	24.24	4.77	1.13



STATION 14-5 CAST # 87002 DATE : 11:10 ON 30/08/ 87
 WATER DEPTH 22.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 55.00 N LONG : 135 56.20 W

STATION 15-5 LAT 70 1.2 N 136 LONG 5.5 W 12:44 DATE 30/08/ 87 PDT ON

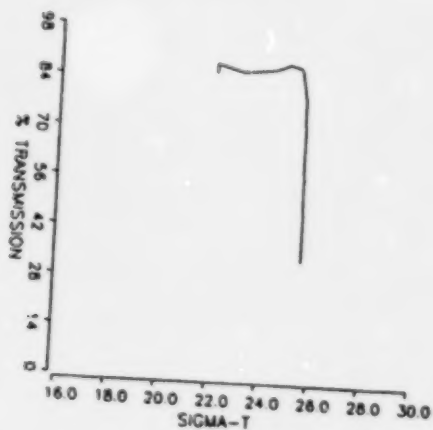
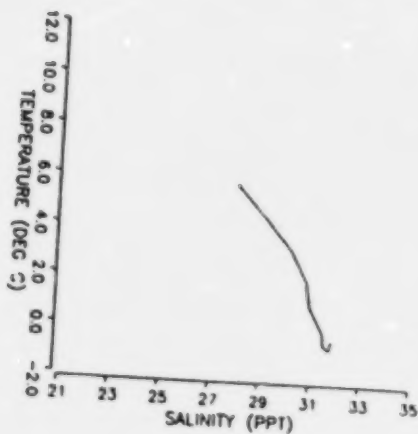
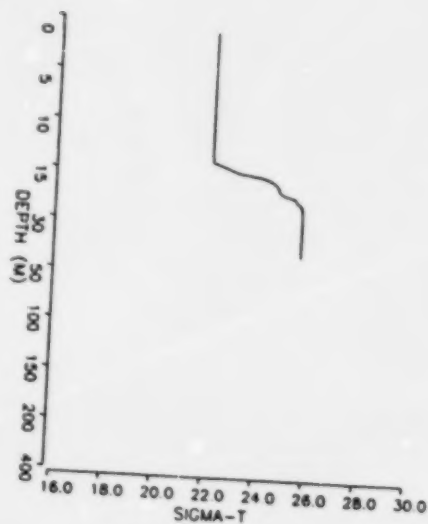
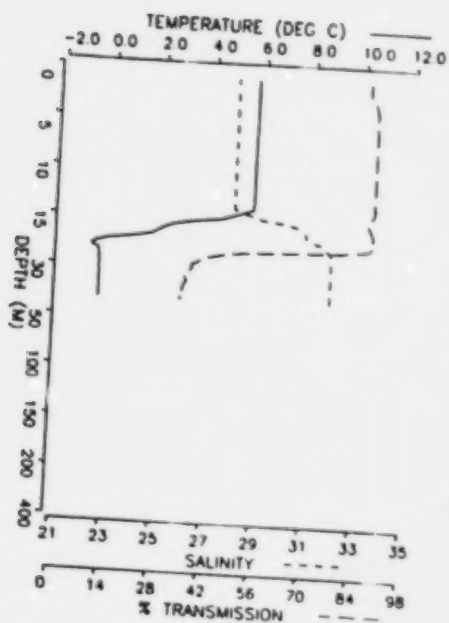
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.12	28.00	84.4	1.76	22.12	6.85	0.06
2.0	5.37	27.85	87.5	0.53	21.98	6.88	0.12
3.0	5.37	27.86	87.6	0.53	21.98	6.89	0.17
4.0	5.38	27.88	87.5	0.53	22.00	6.90	0.23
5.0	5.38	27.87	87.6	0.53	21.99	6.90	0.29
6.0	5.39	27.88	87.6	0.53	22.00	6.91	0.35
7.0	5.39	27.89	87.7	0.53	22.00	6.92	0.41
8.0	5.40	27.89	87.6	0.53	22.01	6.92	0.47
9.0	5.40	27.90	87.7	0.53	22.01	6.93	0.53
10.0	5.40	27.90	87.7	0.53	22.01	6.92	0.59
12.0	5.33	28.01	87.8	0.52	22.11	6.87	0.70
14.0	4.91	28.63	87.2	0.55	22.64	6.48	0.81
16.0	3.05	30.36	86.0	0.61	24.18	4.72	0.90
18.0	1.73	31.03	29.7	4.85	24.81	3.44	0.97
20.0	1.75	31.08	9.1	9.60	24.85	3.46	1.03
22.0	1.78	31.07	8.4	9.93	24.84	3.47	1.10
24.0	1.78	31.07	5.9	11.30	24.84	3.49	1.16
26.0	1.79	31.07	5.0	12.02	24.84	3.50	1.22
28.0	1.79	31.07	3.9	13.00	24.84	3.51	1.28
30.0	1.79	31.07	3.9	13.01	24.84	3.51	1.35
31.0	1.79	31.07	3.7	13.19	24.84	3.51	1.38



STATION 15-5 CAST # 87003 DATE : 12:44 ON 30/08/ 87
 WATER DEPTH 28.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT . 70 1.20 N LONG . 136 5.50 W

STATION 16-5 LAT 70 11.2 N 136 LONG 15.2 W 14:42 PDT ON 30/08/ 87 DATE

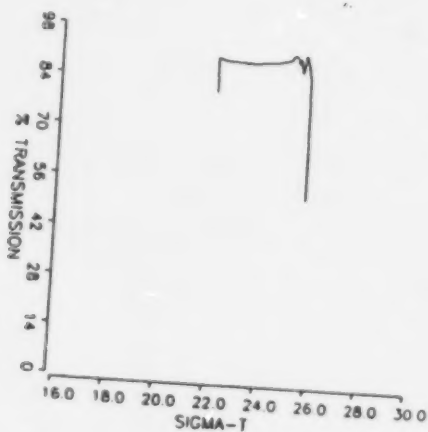
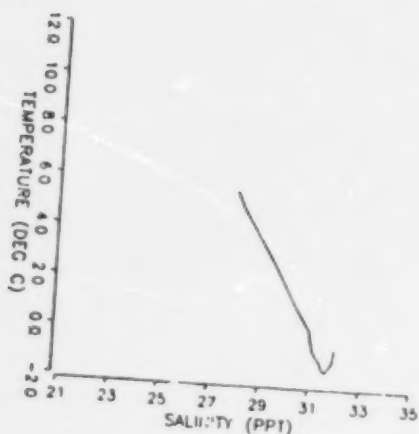
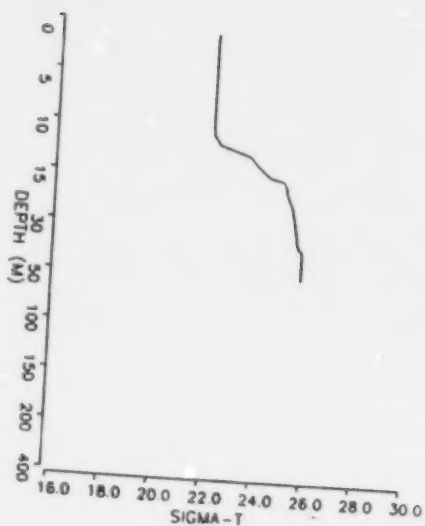
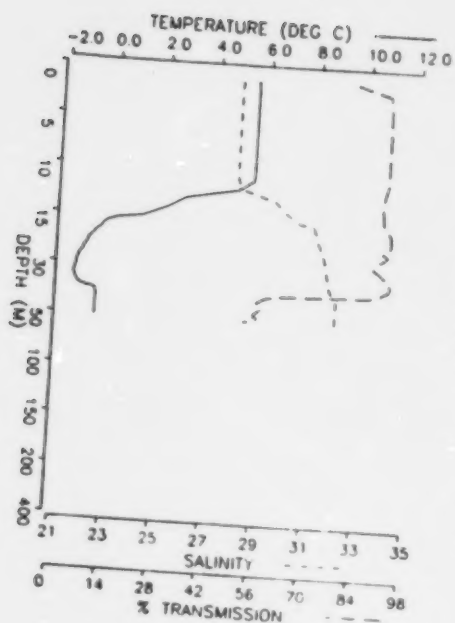
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.71	27.90	85.5	0.63	21.98	7.23	0.06
2.0	5.71	27.90	85.3	0.64	21.98	7.23	0.12
3.0	5.71	27.90	87.1	0.55	21.98	7.23	0.18
4.0	5.71	27.90	87.6	0.53	21.98	7.23	0.24
5.0	5.71	27.91	87.6	0.53	21.98	7.23	0.29
6.0	5.71	27.90	87.7	0.53	21.98	7.23	0.35
7.0	5.70	27.91	87.7	0.52	21.99	7.23	0.41
8.0	5.70	27.91	87.7	0.52	21.99	7.23	0.47
9.0	5.70	27.91	87.7	0.52	21.99	7.23	0.53
10.0	5.70	27.91	87.7	0.52	21.99	7.23	0.59
12.0	5.70	27.91	87.7	0.52	21.99	7.23	0.71
14.0	5.68	27.93	87.8	0.52	22.00	7.21	0.82
16.0	3.19	30.12	86.4	0.59	23.97	4.85	0.92
18.0	2.14	30.70	87.3	0.54	24.52	3.83	0.99
20.0	1.67	30.83	87.6	0.53	24.65	3.37	1.06
22.0	-0.12	31.52	87.5	0.53	25.30	1.62	1.12
24.0	-0.76	31.78	78.6	0.96	25.54	1.00	1.18
26.0	-0.45	31.86	44.6	3.23	25.59	1.31	1.22
28.0	-0.42	31.87	36.7	3.80	25.60	1.34	1.27
30.0	-0.41	31.87	37.0	3.97	25.60	1.35	1.32
35.0	-0.41	31.88	35.7	4.12	25.60	1.36	1.44
40.0	-0.41	31.88	33.9	4.32	25.60	1.36	1.56
43.0	-0.41	31.88	34.0	4.32	25.60	1.37	1.63



STATION 16-5 CAST # 87004 DATE 14:42 ON 30/08/ 87
 WATER DEPTH 42.0 M
 LAT : 70 11.20 N LONG : 136 15.20 W INSTRUMENT : APPL MICROSYS CTD

STATION 17-5 LAT 70 22.1 N 136 LONG 28.2 W DATE 17:03 PDT ON 30/08/ 87

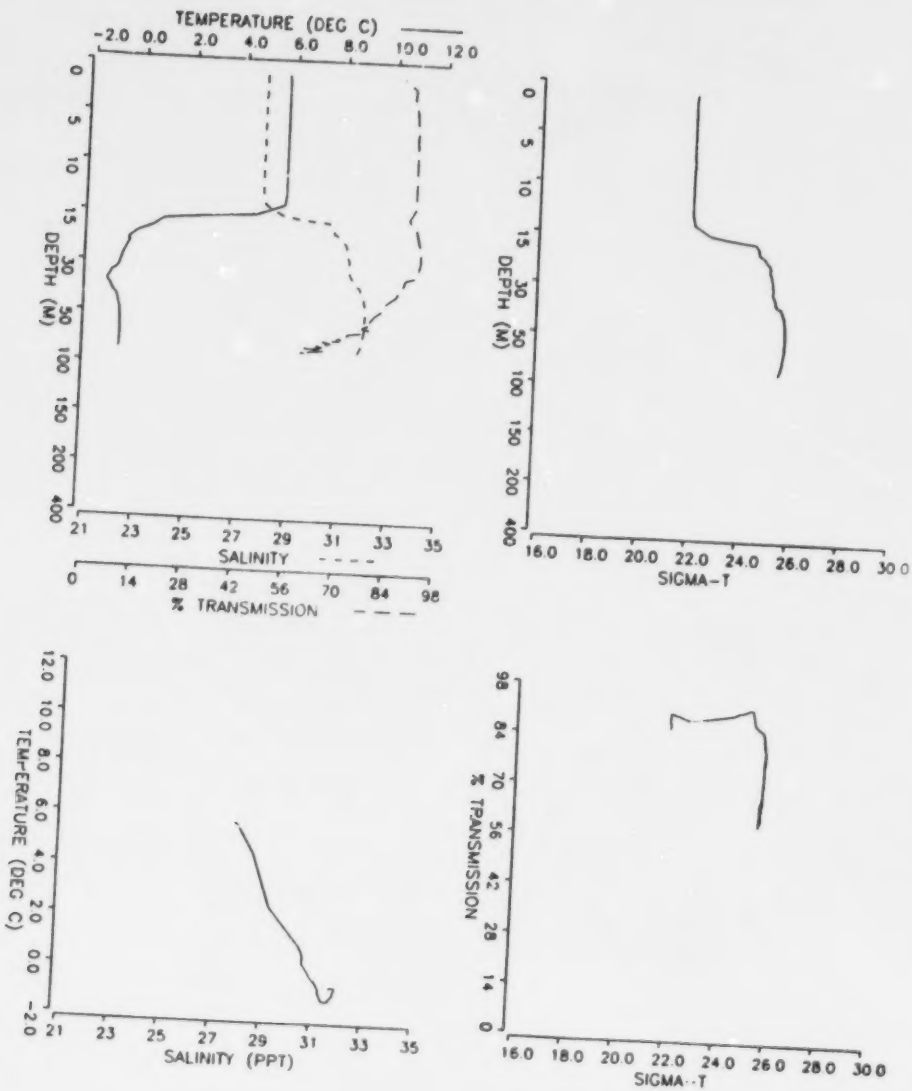
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.52	27.89	80.2	0.88	21.99	7.04	0.06
2.0	5.54	27.88	89.6	0.44	21.98	7.06	0.12
3.0	5.54	27.88	90.0	0.42	21.98	7.06	0.18
4.0	5.54	27.88	90.1	0.42	21.98	7.06	0.24
5.0	5.54	27.88	90.2	0.41	21.98	7.06	0.29
6.0	5.54	27.88	90.2	0.41	21.98	7.06	0.35
7.0	5.54	27.88	90.2	0.41	21.98	7.06	0.41
8.0	5.54	27.88	90.2	0.41	21.98	7.07	0.47
9.0	5.54	27.88	90.2	0.41	21.98	7.06	0.53
10.0	5.54	27.88	90.2	0.41	21.99	7.06	0.59
12.0	4.94	28.16	89.4	0.45	22.27	6.48	0.70
14.0	2.15	29.84	89.3	0.45	23.83	3.79	0.80
16.0	0.17	30.97	90.3	0.41	24.85	1.88	0.87
18.0	-0.37	31.09	91.5	0.35	24.96	1.34	0.93
20.0	-0.65	31.14	91.8	0.34	25.02	1.07	0.99
22.0	-0.90	31.26	91.2	0.37	25.12	0.83	1.05
24.0	-1.01	31.39	90.9	0.38	25.23	0.72	1.11
26.0	-1.15	31.46	88.1	0.50	25.29	0.59	1.16
28.0	-1.33	31.53	87.1	0.55	25.35	0.42	1.21
30.0	-1.39	31.57	89.6	0.44	25.38	0.36	1.27
35.0	-1.44	31.68	91.7	0.35	25.47	0.31	1.39
40.0	-0.63	31.99	61.7	1.93	25.70	1.15	1.52
45.0	-0.57	31.99	56.4	2.29	25.70	1.21	1.63
50.0	-0.57	31.99	54.9	2.40	25.70	1.22	1.75
52.0	-0.57	31.99	51.6	2.65	25.70	1.22	1.79



STATION 17-5 CAST # 87005 DATE : 17:03 ON 30/08/ 87
 WATER DEPTH 55.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 22.10 N LONG : 136 28.20 W

STATION 17-5A LAT 70 26.8 N LONG 136 37.2 W DATE 20:09 PDT ON 30/08/ 87

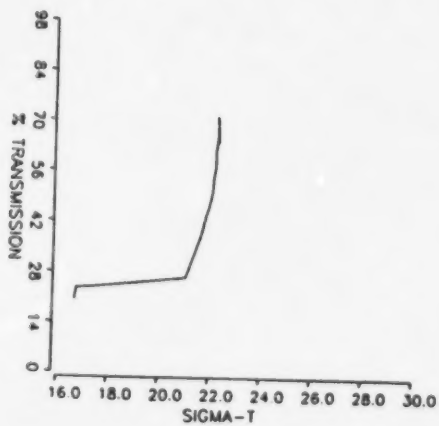
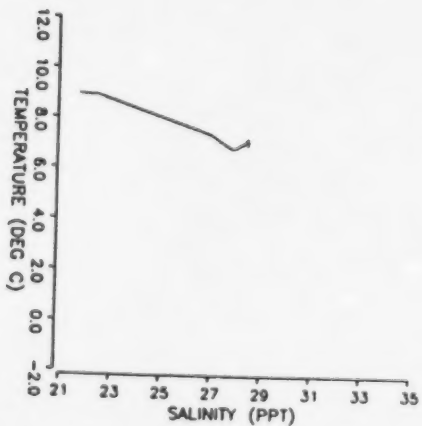
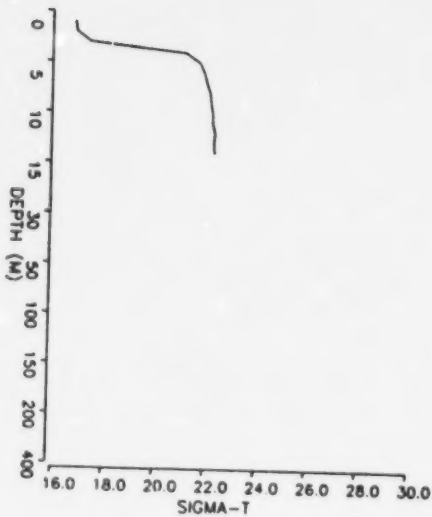
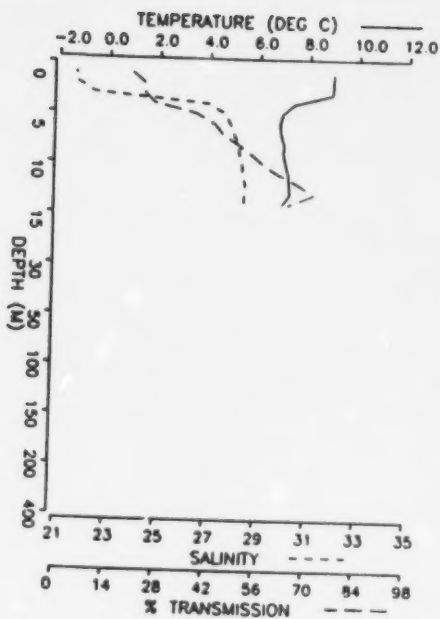
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.68	27.80	85.7	0.62	21.90	7.20	0.06
2.0	5.69	27.79	89.1	0.46	21.89	7.21	0.12
3.0	5.69	27.79	88.9	0.47	21.89	7.21	0.18
4.0	5.70	27.79	89.6	0.44	21.89	7.21	0.24
5.0	5.69	27.79	89.9	0.43	21.89	7.21	0.30
6.0	5.70	27.79	90.1	0.42	21.89	7.21	0.36
7.0	5.70	27.79	90.1	0.42	21.89	7.21	0.42
8.0	5.70	27.79	90.1	0.42	21.90	7.22	0.48
9.0	5.70	27.79	90.1	0.42	21.89	7.22	0.54
10.0	5.70	27.79	90.1	0.42	21.89	7.22	0.60
12.0	5.70	27.79	90.1	0.42	21.89	7.22	0.72
14.0	5.64	27.89	90.0	0.42	21.98	7.16	0.84
16.0	2.40	29.26	89.0	0.47	23.35	4.01	0.94
18.0	0.70	30.60	90.5	0.40	24.53	2.39	1.02
20.0	0.21	30.66	90.9	0.38	24.60	1.90	1.08
22.0	-0.29	30.98	91.3	0.36	24.87	1.42	1.15
24.0	-0.43	31.19	92.0	0.34	25.05	1.29	1.21
26.0	-0.58	31.23	91.9	0.34	25.09	1.15	1.27
28.0	-0.71	31.30	91.8	0.34	25.14	1.02	1.32
30.0	-0.78	31.33	91.3	0.36	25.18	0.96	1.38
35.0	-1.15	31.44	87.6	0.53	25.27	0.60	1.52
40.0	-1.12	31.84	85.7	0.62	25.59	0.65	1.65
45.0	-0.83	31.97	81.6	0.81	25.70	0.95	1.77
50.0	-0.74	32.00	78.9	0.95	25.71	1.05	1.88
55.0	-0.73	31.99	77.3	1.03	25.71	1.06	1.99
60.0	-0.73	31.98	76.8	1.06	25.69	1.07	2.11
65.0	-0.71	31.96	74.0	1.21	25.68	1.08	2.23
70.0	-0.71	31.93	70.9	1.37	25.65	1.09	2.34
75.0	-0.71	31.89	66.0	1.66	25.62	1.09	2.46
80.0	-0.71	31.83	65.5	1.69	25.58	1.09	2.58
85.0	-0.72	31.75	59.0	2.11	25.51	1.08	2.70
86.0	-0.72	31.74	60.4	2.02	25.50	1.08	2.73



STATION 17-5A CAST # 87006 DATE : 20:09 ON 30/08/ 87
 WATER DEPTH 96.0 M
 LAT : 70 26.80 N LONG : 136 37.20 W INSTRUMENT : APPL MICROSYS CTD

STATION 19-5 LAT 69 5.3 N LONG 137 45.7 W DATE 15:53 PDT ON 27/08/ 87

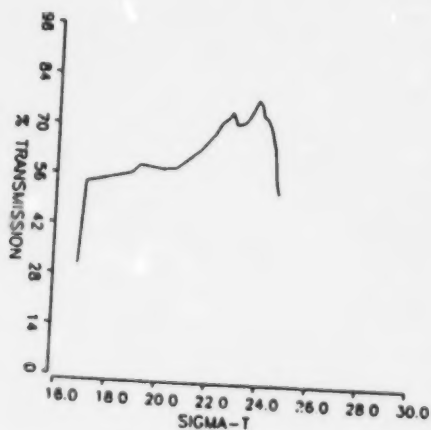
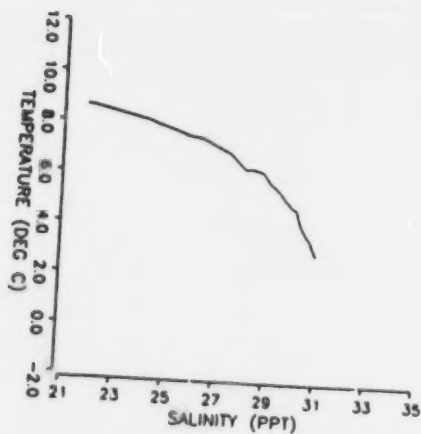
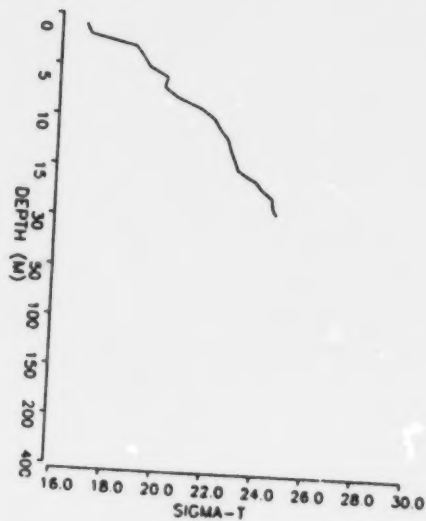
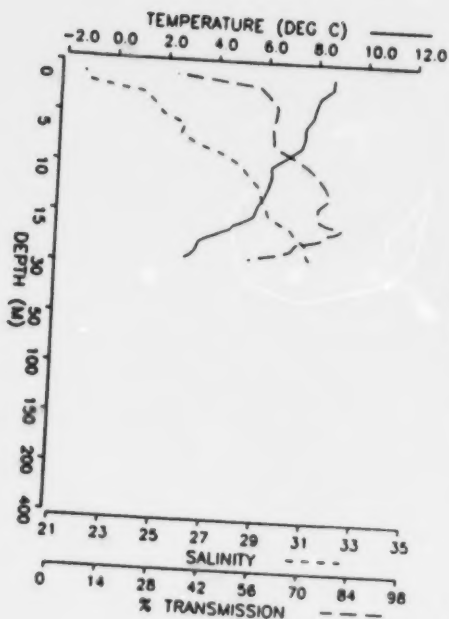
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.95	21.64	20.2	6.39	16.69	10.12	0.11
2.0	8.94	21.71	23.6	5.77	16.74	10.12	0.22
3.0	8.92	22.40	23.7	5.76	17.28	10.14	0.33
4.0	7.35	26.95	26.5	5.31	21.04	8.82	0.41
5.0	6.90	27.61	38.1	3.86	21.62	8.41	0.46
6.0	6.80	27.82	43.2	3.36	21.79	8.32	0.54
7.0	6.84	27.98	45.6	3.14	21.91	8.37	0.60
8.0	6.98	28.16	49.9	2.78	22.04	8.52	0.66
9.0	6.96	28.20	53.8	2.48	22.07	8.50	0.72
10.0	7.04	28.32	57.0	2.25	22.16	8.59	0.78
12.0	7.17	28.45	67.0	1.60	22.24	8.73	0.89
14.0	6.91	28.41	63.9	1.79	22.24	8.46	1.00



STATION 19-5 CAST # 87009 DATE : 15:53 ON 27/08/ 87
 WATER DEPTH 15.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 5.30 N LONG : 137 45.70 W

STATION 20-5 LAT 69 11.1 N LONG 137 50.8 W DATE 19:07 PDT ON 26/08/ 87

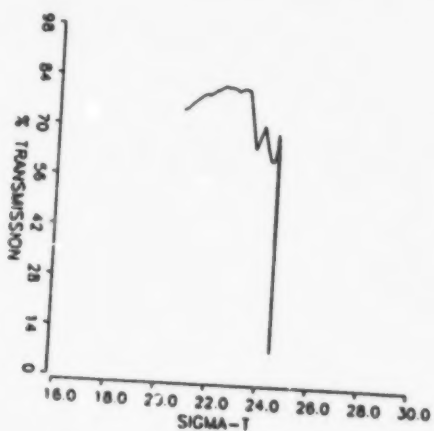
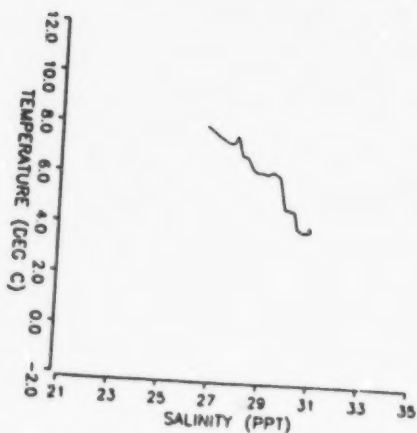
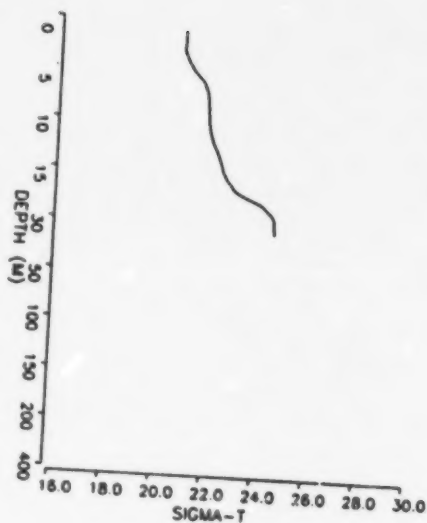
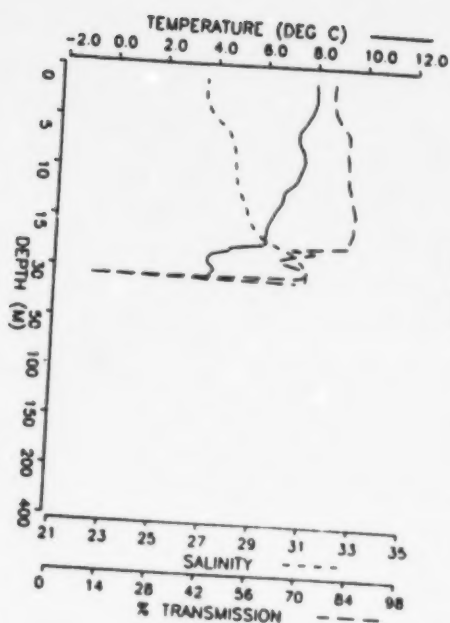
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.65	21.68	30.4	4.76	16.76	9.82	0.11
2.0	8.63	21.95	53.7	2.48	16.97	9.82	0.22
3.0	8.11	24.16	56.6	2.28	18.76	9.42	0.32
4.0	7.96	24.54	58.9	2.11	19.08	9.30	0.41
5.0	7.87	24.84	58.7	2.13	19.33	9.22	0.49
6.0	7.55	25.75	57.8	2.19	20.08	8.96	0.57
7.0	7.56	25.60	58.1	2.17	19.96	8.96	0.65
8.0	7.44	26.29	58.3	2.16	20.52	8.86	0.73
9.0	6.87	27.42	63.7	1.80	21.47	8.37	0.79
10.0	6.26	28.02	68.3	1.53	22.01	7.80	0.86
12.0	6.17	28.75	73.3	1.24	22.60	7.75	0.97
14.0	5.75	29.05	71.3	1.35	22.88	7.34	1.07
16.0	5.42	29.43	71.9	1.32	23.22	7.04	1.17
18.0	4.78	29.98	78.3	0.98	23.72	6.43	1.26
20.0	4.37	30.21	73.6	1.23	23.94	6.03	1.34
22.0	3.72	30.52	70.7	1.39	24.25	5.40	1.42
24.0	3.41	30.74	64.7	1.74	24.45	5.11	1.49
26.0	3.30	30.76	61.5	1.94	24.48	5.00	1.56
28.0	2.91	30.94	51.9	2.63	24.66	4.62	1.63



STATION 20-5 CAST # 87010 DATE : 19:07 ON 26/08/ 87
 WATER DEPTH 27.0 M
 LAT : 69 11.10 N LONG : 137 50.60 W INSTRUMENT : APPL MICROSYS CTD

STATION 21-5 LAT 69 16.6 N 137 LONG 55.4 W 13:13 PDT ON 27/08/ 87 DATE

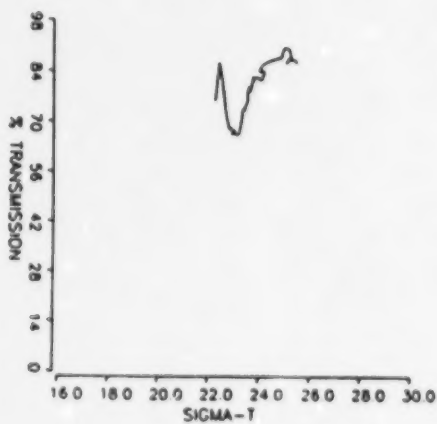
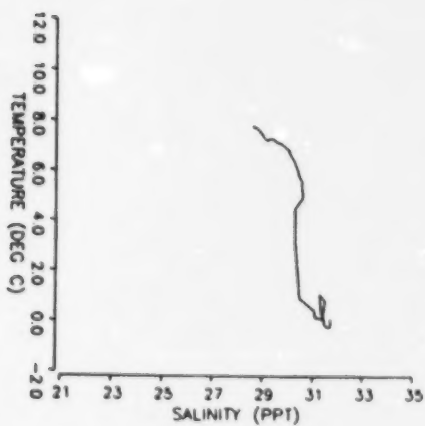
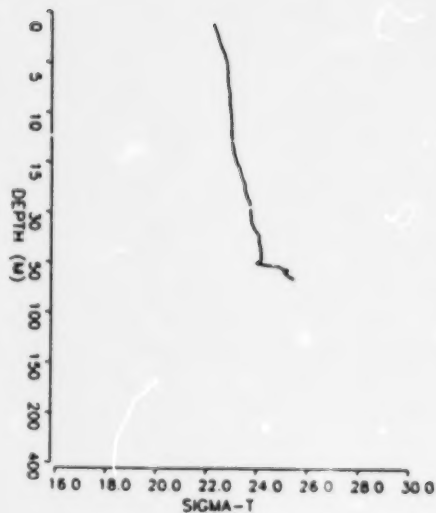
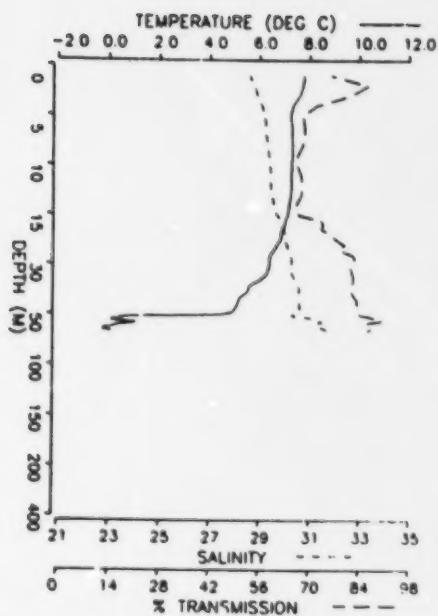
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.98	26.60	75.1	1.15	20.69	9.43	0.07
2.0	7.99	26.59	74.9	1.16	20.68	9.44	0.14
3.0	8.00	26.57	75.0	1.15	20.66	9.45	0.21
4.0	7.86	26.76	75.6	1.12	20.83	9.32	0.29
5.0	7.65	27.06	77.3	1.03	21.09	9.12	0.35
6.0	7.35	27.50	79.5	0.92	21.47	8.85	0.42
7.0	7.36	27.70	79.7	0.91	21.63	8.87	0.48
8.0	7.59	27.81	79.3	0.93	21.69	9.11	0.54
9.0	7.63	27.84	79.7	0.91	21.71	9.16	0.61
10.0	7.48	27.89	80.0	0.90	21.76	9.01	0.67
12.0	6.85	28.03	80.8	0.85	21.95	8.39	0.79
14.0	6.51	28.40	82.1	0.79	22.28	8.07	0.90
16.0	6.25	28.60	81.8	0.80	22.47	7.82	1.01
18.0	6.21	28.81	81.5	0.82	22.64	7.80	1.12
20.0	6.14	29.06	80.7	0.86	22.85	7.74	1.22
22.0	6.05	29.59	81.2	0.83	23.28	7.68	1.32
24.0	4.71	30.22	71.5	1.34	23.92	6.38	1.41
26.0	3.93	30.50	61.7	1.93	24.21	5.61	1.48
28.0	3.92	30.78	65.7	1.68	24.43	5.62	1.58
30.0	4.15	30.85	69.3	1.47	24.47	5.86	1.63
34.0	3.91	30.88	66.4	1.64	24.52	5.62	1.77



STATION 21-5 CAST # 87011 DATE : 13:13 ON 27/08/ 87
 WATER DEPTH 33.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 16.60 N LONG : 137 55.40 W

STATION 23-5 LAT 35 23.2 N 138 LONG 8.0 W 07:10 PDT ON 27/06/ 87 DATE

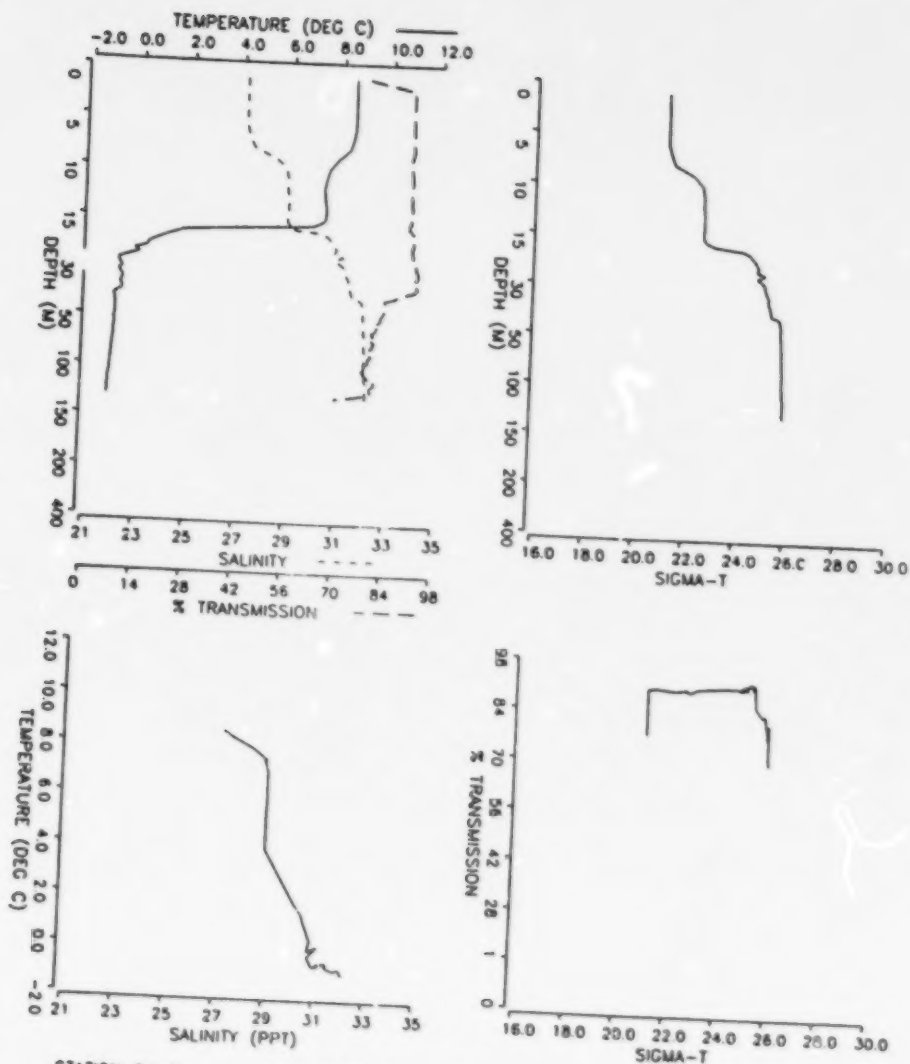
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.78	28.87	75.9	1.10	22.26	9.34	0.08
2.0	7.71	28.77	86.3	0.59	22.42	9.28	0.11
3.0	7.60	28.88	81.7	0.81	22.52	9.18	0.17
4.0	7.32	29.07	72.0	1.31	22.71	8.91	0.22
5.0	7.22	29.19	68.0	1.84	22.82	8.82	0.27
6.0	7.27	29.23	68.4	1.52	22.84	8.87	0.32
7.0	7.27	29.25	68.5	1.51	22.86	8.87	0.37
8.0	7.30	29.34	68.0	1.84	22.93	8.90	0.42
9.0	7.29	29.36	66.6	1.63	22.94	8.90	0.47
10.0	7.27	29.42	66.5	1.63	22.99	8.88	0.52
12.0	7.26	29.44	67.8	1.55	23.01	8.88	0.62
14.0	7.17	29.56	66.2	1.65	23.12	8.79	0.72
16.0	7.05	29.80	70.4	1.40	23.32	8.68	0.81
18.0	6.98	29.88	73.7	1.22	23.39	8.63	0.90
20.0	6.88	29.96	74.4	1.19	23.47	8.53	0.99
22.0	6.86	30.08	77.1	1.04	23.55	8.51	1.08
24.0	6.88	30.09	79.8	0.90	23.59	8.34	1.17
26.0	6.83	30.19	79.5	0.92	23.69	8.19	1.25
28.0	6.41	30.27	82.7	0.78	23.77	8.08	1.34
30.0	6.40	30.27	82.0	0.80	23.77	8.07	1.42
35.0	6.14	30.37	82.2	0.78	23.88	7.82	1.63
40.0	6.55	30.89	81.9	0.80	24.12	7.25	1.82
45.0	5.15	30.61	83.2	0.74	24.18	6.85	2.01
50.0	4.50	30.30	84.0	0.70	24.00	6.19	2.20
55.0	0.14	31.11	90.5	0.40	24.96	1.88	2.37
60.0	0.39	31.34	87.2	0.55	25.13	2.15	2.51
65.0	-0.24	31.71	86.8	0.58	25.46	1.55	2.65
66.0	0.10	31.73	86.3	0.59	25.46	1.68	2.68



STATION 23-5 CAST # 87013 DATE 07:10 ON 27/08/ 87
 WATER DEPTH 66.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 23.20 N LONG : 138 8.00 W

STATION 24-5 LAT 69 38.5 N 138 LONG 19.0 W 05:14 PDT ON 27/08/ 87 DATE

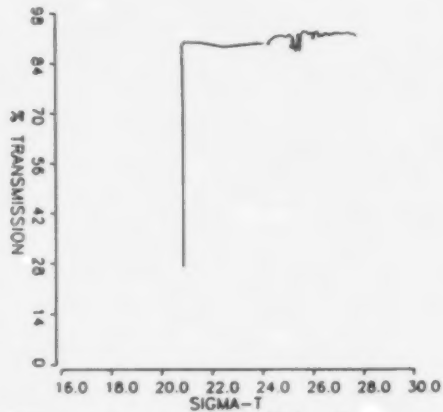
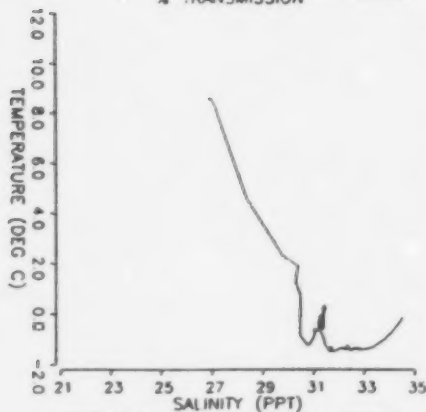
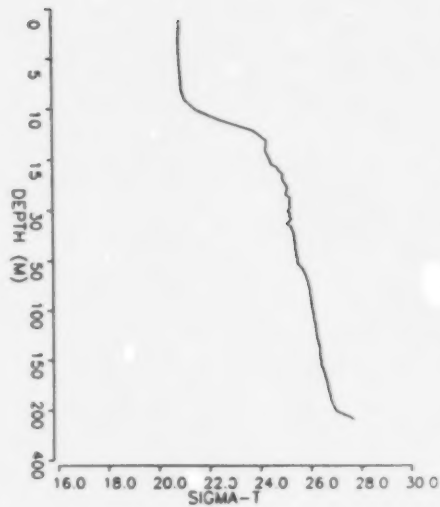
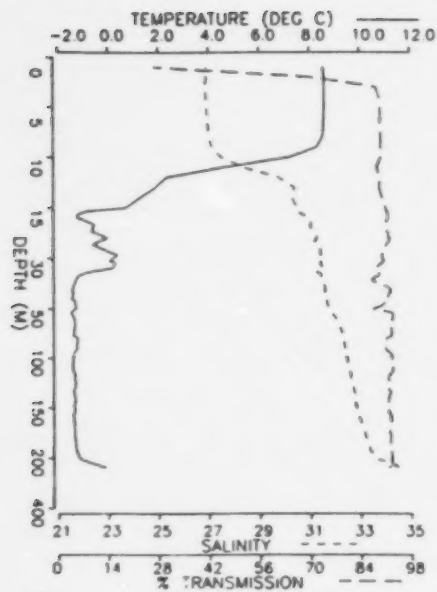
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.50	27.13	77.2	1.03	21.04	9.98	0.07
2.0	8.50	27.14	90.0	0.42	21.04	9.98	0.14
3.0	8.50	27.14	90.0	0.42	21.04	9.98	0.20
4.0	8.50	27.14	90.0	0.42	21.04	9.98	0.27
5.0	8.50	27.14	90.1	0.42	21.04	9.98	0.34
6.0	8.50	27.14	90.0	0.42	21.05	9.98	0.41
7.0	8.43	27.28	90.1	0.42	21.16	9.92	0.48
8.0	8.29	27.46	90.2	0.41	21.32	9.79	0.54
9.0	7.84	28.34	89.5	0.44	22.07	9.39	0.60
10.0	7.50	28.77	89.8	0.43	22.46	9.08	0.66
12.0	7.31	28.85	89.9	0.43	22.54	8.89	0.77
14.0	7.41	28.90	90.2	0.41	22.57	8.99	0.87
16.0	7.23	28.88	89.6	0.44	22.57	8.81	0.98
18.0	3.83	23.97	90.3	0.41	23.01	5.42	1.08
20.0	1.31	30.48	90.8	0.39	24.39	2.99	1.16
22.0	0.60	30.73	90.8	0.38	24.64	2.30	1.23
24.0	0.28	30.87	90.4	0.40	24.76	1.98	1.30
26.0	0.01	31.16	90.7	0.39	25.00	1.73	1.36
28.0	-0.81	30.99	91.8	0.34	24.90	0.91	1.42
30.0	-0.71	31.16	92.0	0.33	25.03	1.01	1.48
35.0	-0.62	31.36	91.7	0.35	25.19	1.12	1.63
40.0	-0.66	31.62	87.1	0.55	25.32	1.10	1.76
45.0	-0.90	31.99	82.9	0.75	25.71	0.88	1.88
50.0	-0.89	32.01	82.2	0.79	25.73	0.89	2.00
55.0	-0.92	32.04	81.3	0.83	25.75	0.88	2.11
60.0	-0.92	32.05	80.8	0.85	25.76	0.88	2.22
65.0	-0.93	32.07	79.8	0.90	25.77	0.87	2.34
70.0	-0.94	32.07	79.3	0.93	25.77	0.87	2.45
75.0	-0.97	32.08	79.8	0.90	25.79	0.84	2.56
80.0	-0.97	32.09	79.5	0.92	25.80	0.84	2.67
85.0	-0.99	32.10	79.1	0.94	25.80	0.83	2.78
90.0	-1.01	32.10	78.6	0.96	25.81	0.82	2.89
95.0	-1.02	32.11	77.9	1.00	25.81	0.81	3.00
100.0	-1.04	32.11	77.6	1.02	25.81	0.80	3.11
110.0	-1.08	32.13	78.7	0.96	25.83	0.76	3.33
120.0	-1.11	32.18	79.5	0.92	25.87	0.74	3.54
130.0	-1.12	32.19	69.9	1.43	25.88	0.74	3.75
131.0	-1.12	32.19	69.5	1.46	25.88	0.74	3.78



STATION 24-5 CAST # 87014 DATE : 05:14 ON 27/08/ 87
 WATER DEPTH 138.0 M
 LAT : 69 38.50 N LONG : 138 19.00 W INSTRUMENT : APPL MICROSYS CTD

STATION 25-5 (SS-4) LAT 69 56.1 N LONG 138 34.4 W DATE 11:41 PDT ON 26/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.55	26.92	27.0	5.24	20.86	10.02	0.07
2.0	8.58	26.91	69.8	1.44	20.85	10.05	0.14
3.0	8.58	26.87	88.5	0.49	20.82	10.05	0.21
4.0	8.59	26.90	89.5	0.44	20.84	10.06	0.28
5.0	8.58	26.92	89.8	0.43	20.86	10.05	0.35
6.0	8.57	26.95	89.8	0.43	20.88	10.04	0.42
7.0	8.56	26.98	89.8	0.43	20.91	10.03	0.49
8.0	8.52	27.01	89.8	0.43	20.94	9.99	0.56
9.0	8.29	27.14	89.9	0.43	21.07	9.77	0.63
10.0	7.16	27.50	89.9	0.43	21.50	8.66	0.69
12.0	2.31	29.78	89.5	0.44	23.77	3.94	0.80
14.0	1.27	30.29	90.2	0.41	24.24	2.94	0.87
16.0	-0.85	30.47	91.4	0.36	24.48	0.82	0.95
18.0	-1.23	30.83	91.7	0.35	24.78	0.47	1.01
20.0	-0.56	31.01	91.5	0.36	24.91	1.15	1.07
22.0	-0.67	31.18	91.6	0.35	25.05	1.05	1.13
24.0	-0.04	31.26	92.1	0.33	25.09	1.69	1.19
26.0	-0.60	31.39	91.2	0.37	25.21	1.13	1.25
28.0	0.02	31.41	90.4	0.40	25.21	1.76	1.30
30.0	0.20	31.32	90.1	0.42	25.13	1.94	1.36
35.0	-0.55	31.23	89.0	0.47	25.08	1.18	1.50
40.0	-1.34	31.55	89.1	0.46	25.36	0.42	1.63
45.0	-1.41	31.59	91.4	0.36	25.40	0.35	1.76
50.0	-1.27	31.69	87.3	0.54	25.48	0.50	1.89
55.0	-1.46	31.84	92.9	0.29	25.61	0.32	2.01
60.0	-1.35	32.00	92.6	0.31	25.73	0.45	2.13
65.0	-1.33	32.13	92.2	0.32	25.84	0.48	2.24
70.0	-1.36	32.20	92.4	0.32	25.90	0.46	2.35
75.0	-1.37	32.25	92.5	0.31	25.94	0.45	2.45
80.0	-1.23	32.30	91.0	0.38	25.97	0.59	2.55
85.0	-1.26	32.34	90.9	0.38	26.01	0.57	2.66
90.0	-1.26	32.37	90.9	0.38	26.03	0.58	2.76
95.0	-1.39	32.39	92.1	0.33	26.05	0.46	2.85
100.0	-1.40	32.44	92.5	0.31	26.09	0.45	2.95
110.0	-1.42	32.52	93.0	0.29	26.16	0.44	3.14
120.0	-1.35	32.60	91.8	0.34	26.22	0.53	3.32
130.0	-1.35	32.70	91.6	0.35	26.30	0.54	3.50
140.0	-1.34	32.78	91.7	0.35	26.36	0.56	3.67
150.0	-1.35	32.84	91.7	0.35	26.41	0.56	3.83
175.0	-1.35	33.15	91.8	0.34	26.66	0.59	4.20
200.0	-1.16	33.58	92.6	0.31	26.99	0.83	4.51
225.0	-0.49	34.29	92.2	0.33	27.55	1.56	4.71
238.0	-0.12	34.51	91.3	0.36	27.72	1.95	4.77



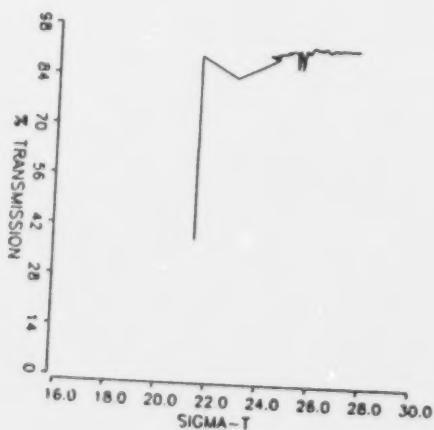
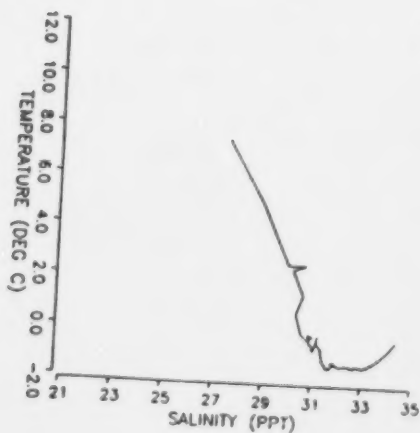
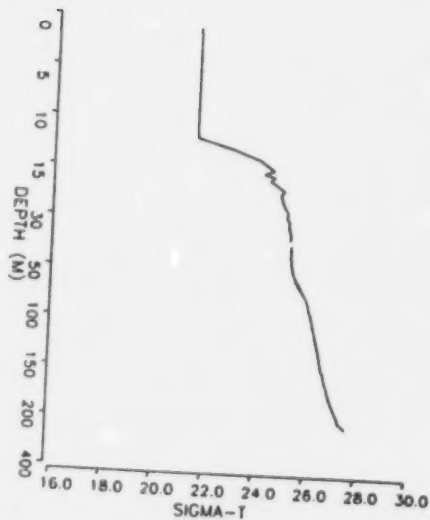
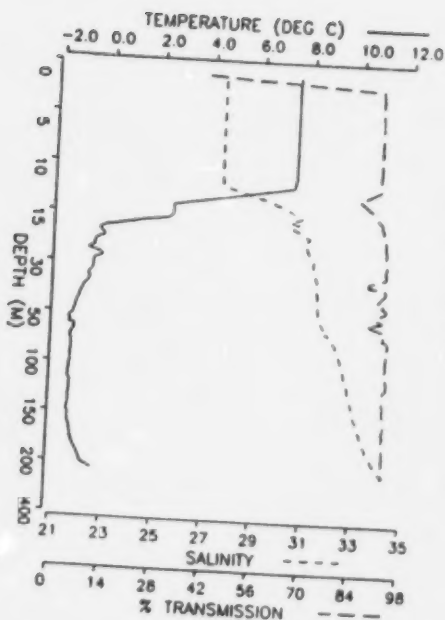
STATION 25-5 (S) CAST # 87078
 WATER DEPTH 250.0 M
 LAT : 69 56.10 N LONG : 138 34.40 W

DATE : 11:41

ON 26/08/ 87
 INSTRUMENT : APPL MICROSYS CTC

STATION 26-5 LAT 70 11.0 N 138 LONG 53.0 W DATE 19:07 PDT ON 26/08/ 87

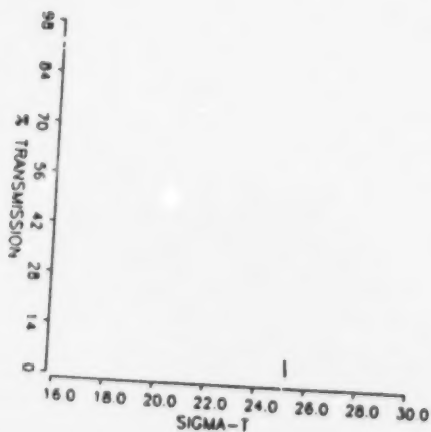
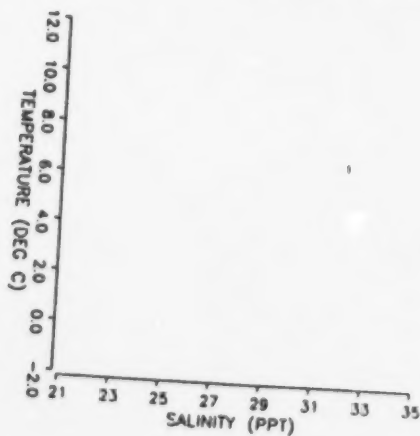
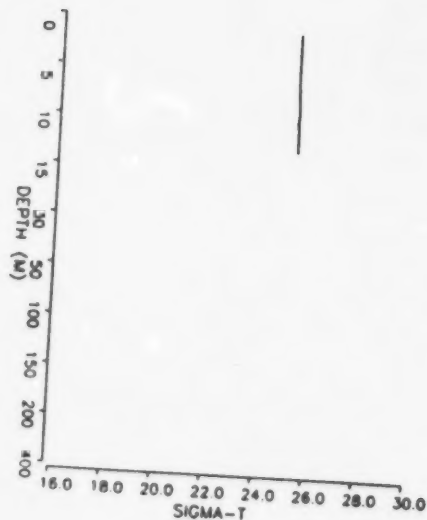
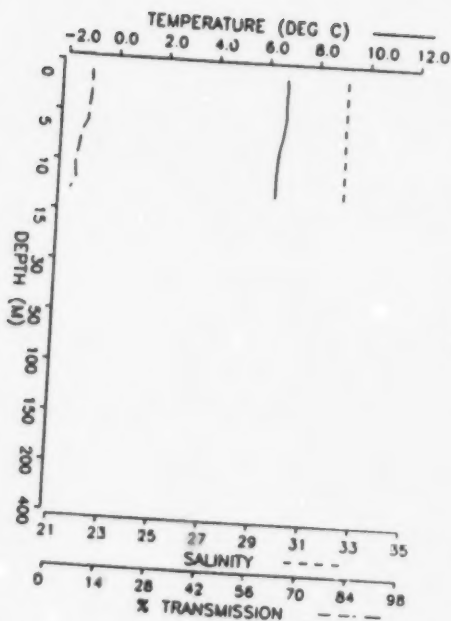
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.42	27.44	38.4	3.83	21.42	8.92	0.06
2.0	7.42	27.44	89.6	0.44	21.42	8.91	0.13
3.0	7.41	27.44	89.8	0.43	21.42	8.91	0.19
4.0	7.41	27.44	89.8	0.43	21.42	8.91	0.26
5.0	7.41	27.44	89.8	0.43	21.42	8.91	0.32
6.0	7.41	27.44	89.8	0.43	21.42	8.91	0.39
7.0	7.41	27.45	89.8	0.43	21.42	8.91	0.45
8.0	7.41	27.45	89.8	0.43	21.43	8.91	0.51
9.0	7.41	27.45	89.9	0.43	21.42	8.91	0.58
10.0	7.41	27.45	89.8	0.43	21.43	8.91	0.64
12.0	7.33	27.47	89.8	0.43	21.46	8.84	0.77
14.0	2.53	29.99	87.6	0.53	23.92	4.17	0.87
16.0	2.37	30.19	90.6	0.39	24.09	4.03	0.95
18.0	0.63	30.36	90.9	0.38	24.33	2.30	1.02
20.0	-0.39	30.80	91.3	0.36	24.73	1.31	1.09
22.0	-0.15	30.85	91.8	0.34	24.76	1.55	1.15
24.0	-0.58	30.93	92.0	0.33	24.84	1.13	1.21
26.0	-0.81	31.07	92.0	0.33	24.96	0.90	1.28
28.0	-0.21	31.23	92.2	0.33	25.07	1.51	1.33
30.0	-0.60	31.29	91.8	0.34	25.14	1.14	1.39
35.0	-0.77	31.39	87.2	0.55	25.22	0.97	1.53
40.0	-0.97	31.40	91.3	0.36	25.24	0.78	1.67
45.0	-1.17	31.44	92.4	0.31	25.27	0.58	1.81
50.0	-1.31	31.53	91.6	0.35	25.35	0.45	1.94
55.0	-1.47	31.67	88.4	0.50	25.43	0.30	2.07
60.0	-1.44	31.66	92.4	0.32	25.46	0.34	2.20
65.0	-1.31	31.92	92.1	0.33	25.67	0.49	2.32
70.0	-1.34	32.05	93.0	0.29	25.77	0.47	2.43
75.0	-1.40	32.18	93.3	0.28	25.88	0.42	2.54
80.0	-1.37	32.28	92.9	0.30	25.96	0.46	2.65
85.0	-1.35	32.34	92.9	0.30	26.01	0.48	2.75
90.0	-1.37	32.42	92.7	0.30	26.07	0.47	2.85
95.0	-1.36	32.48	92.9	0.30	26.12	0.49	2.94
100.0	-1.36	32.55	92.5	0.31	26.18	0.50	3.04
110.0	-1.44	32.65	93.2	0.28	26.27	0.43	3.22
120.0	-1.35	32.78	92.3	0.32	26.36	0.53	3.39
130.0	-1.37	32.90	92.3	0.32	26.46	0.53	3.55
140.0	-1.38	32.99	92.4	0.32	26.54	0.53	3.70
150.0	-1.44	33.11	93.0	0.29	26.64	0.49	3.85
175.0	-1.24	33.50	92.9	0.29	26.94	0.72	4.16
200.0	-0.81	34.00	92.8	0.30	27.34	1.20	4.39
225.0	-0.36	34.38	92.7	0.30	27.63	1.69	4.53



STATION 26-5 CAST # 87015 DATE 19:07 ON 26/08/ 87
 WATER DEPTH 400.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 11.00 N LONG : 138 53.00 W

STATION 28-5 LAT 70 12.4 N 131 LONG 5.0 W 15:50 PDT ON 21/08/ 87 DATE

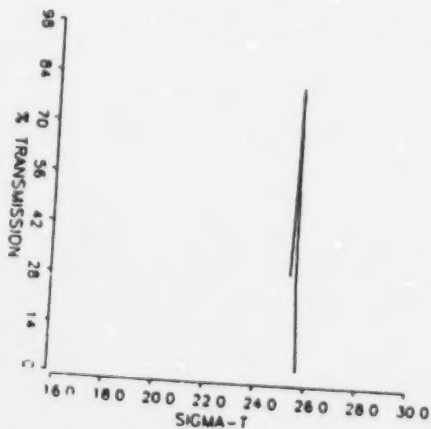
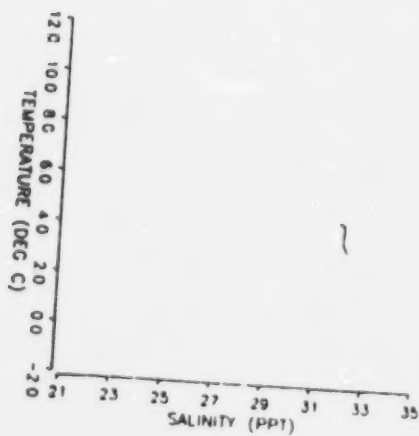
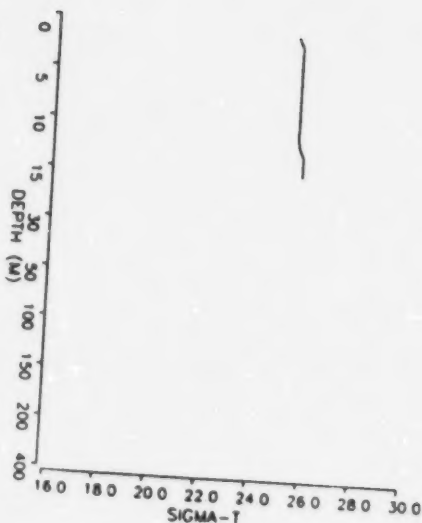
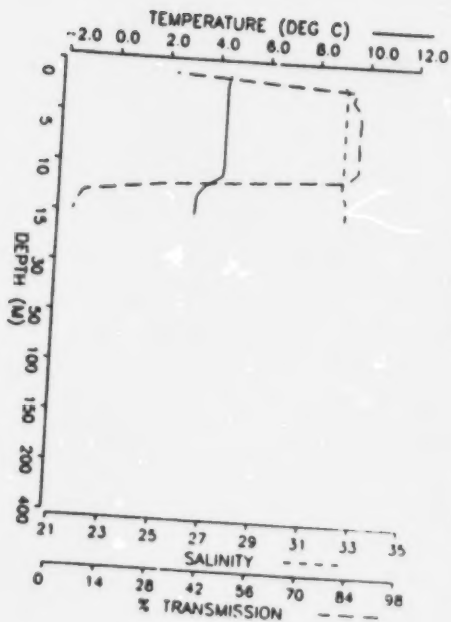
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.73	32.15	6.6	10.86	25.21	8.49	0.03
2.0	6.73	32.14	6.8	10.75	25.20	8.49	0.06
3.0	6.73	32.14	6.7	10.81	25.20	8.49	0.08
4.0	6.73	32.14	6.5	10.92	25.20	8.49	0.11
5.0	6.73	32.14	6.1	11.18	25.20	8.50	0.14
6.0	6.69	32.13	6.1	11.18	25.20	8.43	0.17
7.0	6.63	32.15	4.6	12.33	25.22	8.40	0.19
8.0	6.54	32.15	4.1	12.74	25.23	8.30	0.22
9.0	6.47	32.16	3.7	13.18	25.25	8.24	0.25
10.0	6.46	32.15	3.0	14.00	25.25	8.23	0.28
12.0	6.45	32.16	3.5	13.38	25.25	8.21	0.33
13.0	6.43	32.16	1.9	15.93	25.25	8.20	0.36



STATION 28-5 CAST # 87016 DATE : 15:00 ON 21/08/ 87
 WATER DEPTH 14.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 12.40 N LONG : 131 5.00 W

STATION 29-5 LAT 70 17.0 N 130 LONG 56.0 W DATE 08:00 PDT ON 21/08/ 87

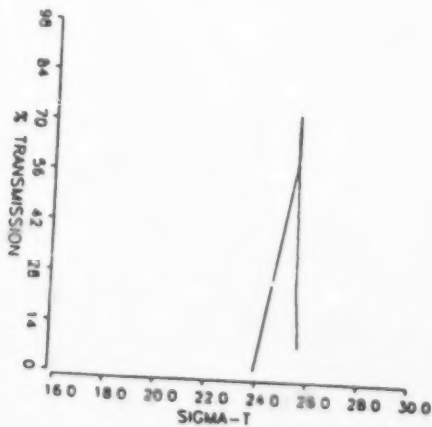
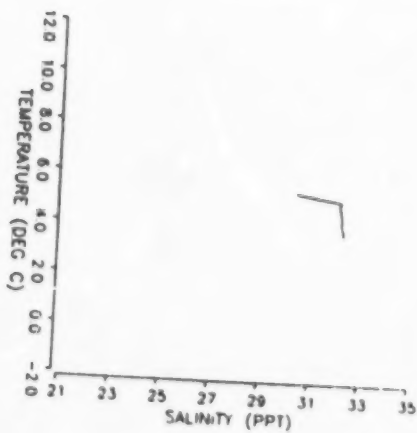
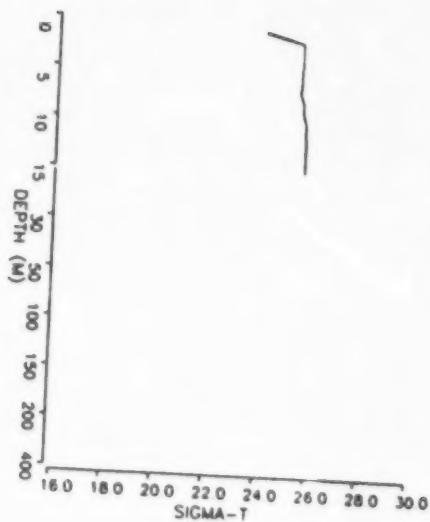
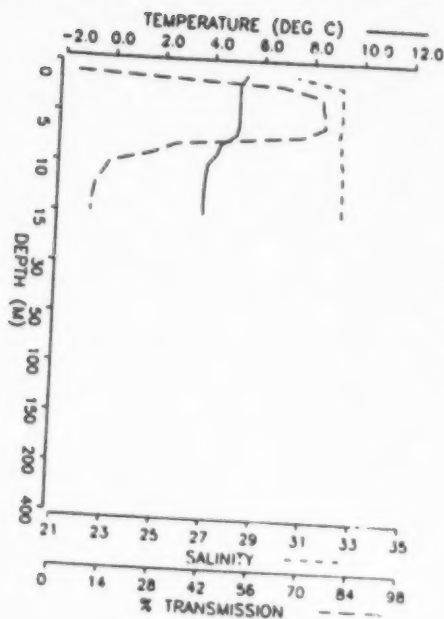
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.44	31.88	29.6	4.87	25.26	6.19	0.03
2.0	4.33	32.11	80.6	0.86	25.45	6.08	0.05
3.0	4.33	32.10	79.4	0.92	25.45	6.08	0.08
4.0	4.32	32.10	81.8	0.80	25.45	6.08	0.10
5.0	4.32	32.10	82.0	0.80	25.45	6.08	0.13
6.0	4.32	32.10	81.9	0.80	25.45	6.08	0.16
7.0	4.32	32.10	81.7	0.81	25.45	6.08	0.18
8.0	4.32	32.10	81.9	0.80	25.45	6.08	0.21
9.0	4.32	32.11	81.8	0.80	25.45	6.08	0.23
10.0	4.32	32.10	81.9	0.80	25.45	6.08	0.26
12.0	3.61	32.06	27.6	5.14	25.48	5.37	0.31
14.0	3.24	32.23	3.7	13.15	25.66	5.02	0.36
15.0	3.22	32.24	2.8	14.29	25.66	5.00	0.38



STATION 29-5 CAST # 87017 DATE 08:00 ON 21/08/ 87
 WATER DEPTH 170 M INSTRUMENT APPL MICROSYS CTD
 LAT . 70 17.05 N LONG . 130 56.00 W

STATION 29-5A LAT 70 18.4 N LONG 130 57.2 W DATE 12:26 PDT ON 21/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.32	30.31	1.6	18.47	23.92	6.98	0.04
2.0	5.02	32.16	61.2	1.96	25.42	6.78	0.07
3.0	5.02	32.16	72.6	1.28	25.42	6.78	0.10
4.0	5.03	32.16	72.6	1.28	25.42	6.79	0.12
5.0	5.03	32.15	73.2	1.25	25.42	6.80	0.15
6.0	5.03	32.15	73.4	1.23	25.41	6.79	0.16
7.0	4.93	32.07	67.3	1.59	25.36	6.68	0.20
8.0	4.31	32.18	31.7	4.60	25.51	6.08	0.23
9.0	4.18	32.15	24.5	5.63	25.50	5.94	0.25
10.0	3.80	32.25	13.1	8.12	25.62	5.57	0.28
12.0	3.71	32.25	9.3	9.50	25.63	5.48	0.32
14.0	3.66	32.25	8.1	10.06	25.63	5.46	0.37
16.0	3.69	32.25	8.2	10.02	25.63	5.46	0.40



STATION 29-5A CAST # R7018 DATE 12 26 ON 21/08/ 87
 WATER DEPTH 130 M
 LAT. 70 18.40 N LONG 130 57.20 W INSTRUMENT APPL MICROSYS CTD

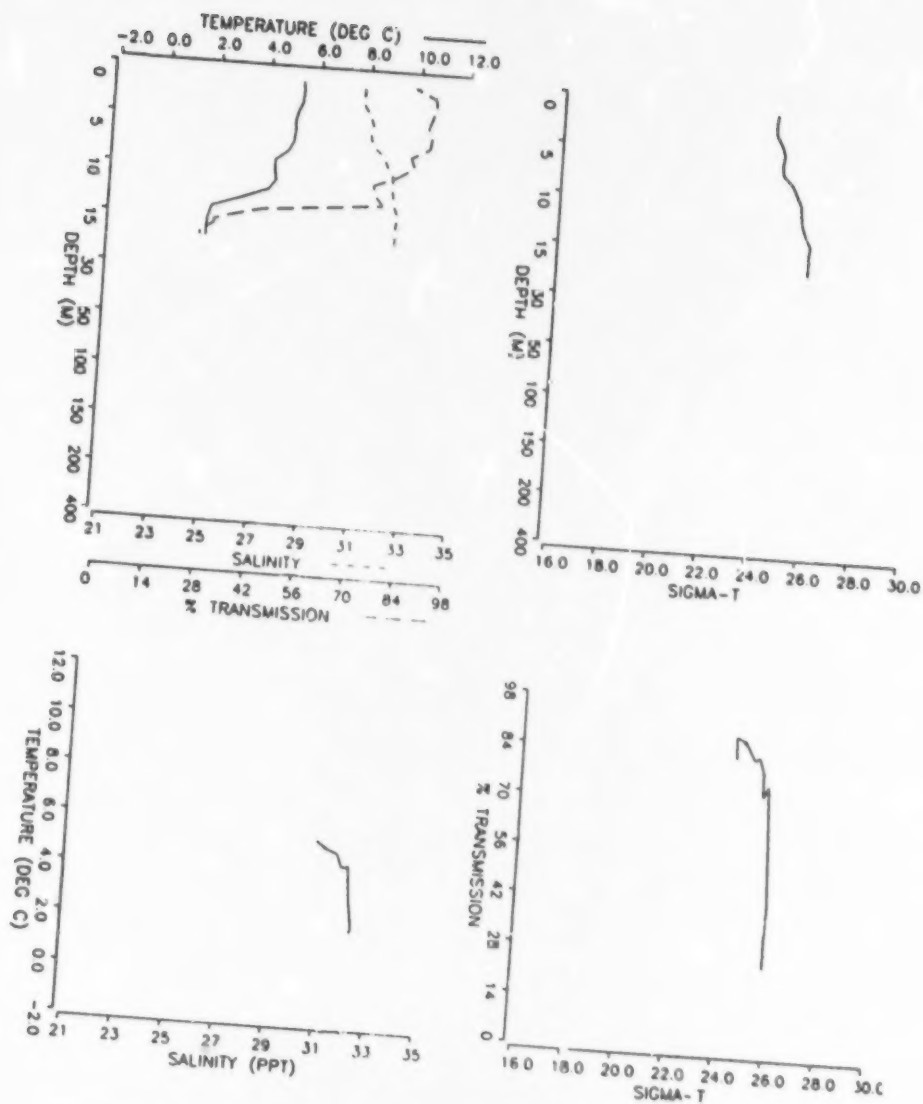
STATION
30-5

LAT
70 23.0 N 130

LONG
59.3 W

DATE
14:03 PDT ON 21/08/ 87

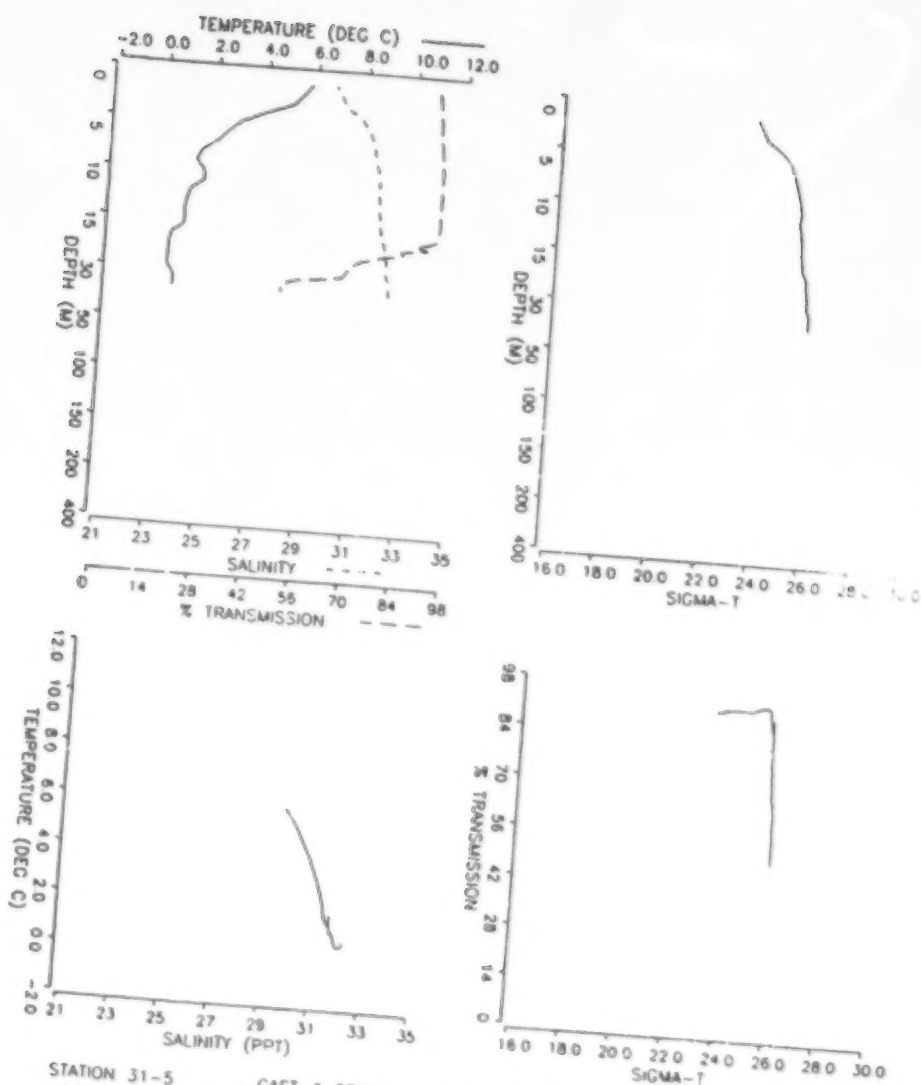
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.31	30.78	82.6	0.77	24.30	7.00	0.04
2.0	5.34	30.75	88.5	0.49	24.27	7.02	0.07
3.0	5.32	30.78	88.6	0.48	24.29	7.01	0.11
4.0	5.14	31.03	87.7	0.53	24.51	6.84	0.15
5.0	5.04	31.18	86.7	0.57	24.64	6.75	0.18
6.0	5.06	31.10	87.8	0.52	24.66	6.76	0.21
7.0	5.03	31.17	87.5	0.53	24.64	6.74	0.25
8.0	4.83	31.63	82.3	0.78	25.02	6.57	0.28
9.0	4.33	31.82	83.3	0.73	25.22	6.08	0.31
10.0	4.33	32.05	78.9	0.95	25.41	6.09	0.33
12.0	4.12	32.11	72.7	1.27	25.48	5.88	0.38
14.0	1.89	32.34	41.8	3.49	25.85	3.67	0.43
16.0	1.74	32.28	28.1	5.08	25.81	3.52	0.48
18.0	1.72	32.28	26.8	5.26	25.81	3.50	0.52
20.0	1.71	32.28	24.3	5.66	25.82	3.49	0.56
21.0	1.71	32.28	24.5	5.62	25.81	3.49	0.59



STATION 30-5
 WATER DEPTH 23.0 M
 LAT : 70 23.00 N
 CAST # 87019
 DATE : 14:03
 LONG : 130 59.30 W
 ON 21/08/ 87
 INSTRUMENT : APPL MICROSYS CTD

STATION 31-5 LAT 70 28.0 N 131 LONG 10.4 W 00:03 PDT ON 21/08/ 87

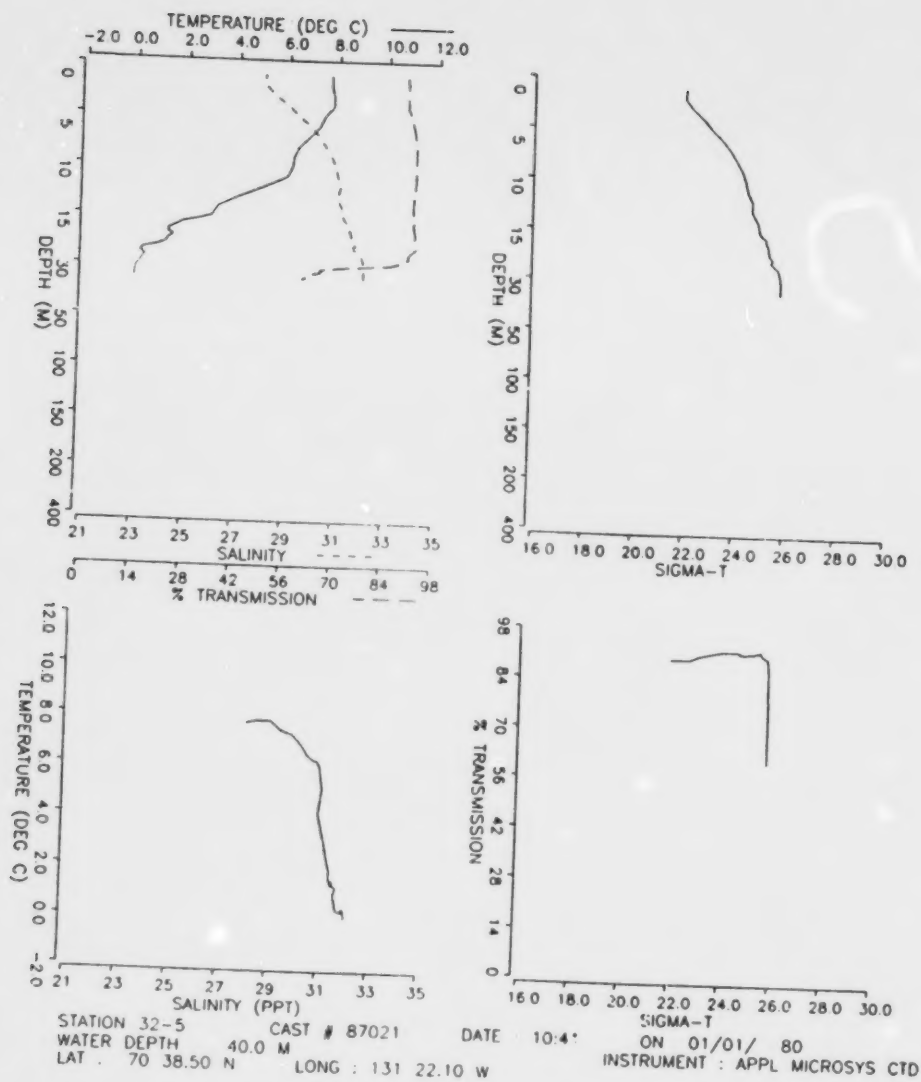
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.77	29.72	90.3	0.41	23.41	7.40	0.05
2.0	5.45	29.97	90.6	0.39	23.65	7.09	0.09
3.0	5.08	30.19	91.0	0.38	23.86	6.73	0.13
4.0	3.93	30.77	91.2	0.37	24.43	5.62	0.17
5.0	3.00	31.14	91.3	0.37	24.81	4.70	0.20
6.0	2.49	31.28	91.6	0.35	24.96	4.21	0.23
7.0	2.09	31.41	92.0	0.33	25.09	3.82	0.26
8.0	1.49	31.49	92.2	0.32	25.20	3.22	0.29
9.0	1.27	31.59	92.4	0.32	25.29	3.01	0.32
10.0	1.60	31.70	92.3	0.32	25.36	3.35	0.35
12.0	1.11	31.71	92.4	0.32	25.39	2.85	0.40
14.0	0.91	31.77	92.3	0.32	25.46	2.66	0.45
16.0	0.94	31.84	92.0	0.33	25.51	2.69	0.50
18.0	0.74	31.88	90.3	0.41	25.55	2.50	0.55
20.0	0.42	32.00	89.4	0.45	25.67	2.19	0.60
22.0	0.36	32.04	82.5	0.77	25.70	2.13	0.64
24.0	0.37	32.09	74.0	1.21	25.74	2.14	0.69
26.0	0.36	32.12	68.9	1.49	25.77	2.13	0.73
28.0	0.35	32.14	67.0	1.60	25.78	2.21	0.78
30.0	0.43	32.22	65.7	1.68	25.84	2.41	0.82
35.0	0.61	32.28	48.9	2.86	25.88	2.41	0.93
37.0	0.61	32.28	49.0	2.85	25.86	2.41	0.97



STATION 31-5 CAST # R7020 DATE : 00:03 ON 21/03/ 87
 WATER DEPTH 37.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 28.00 N LONG : 131 10.40 W

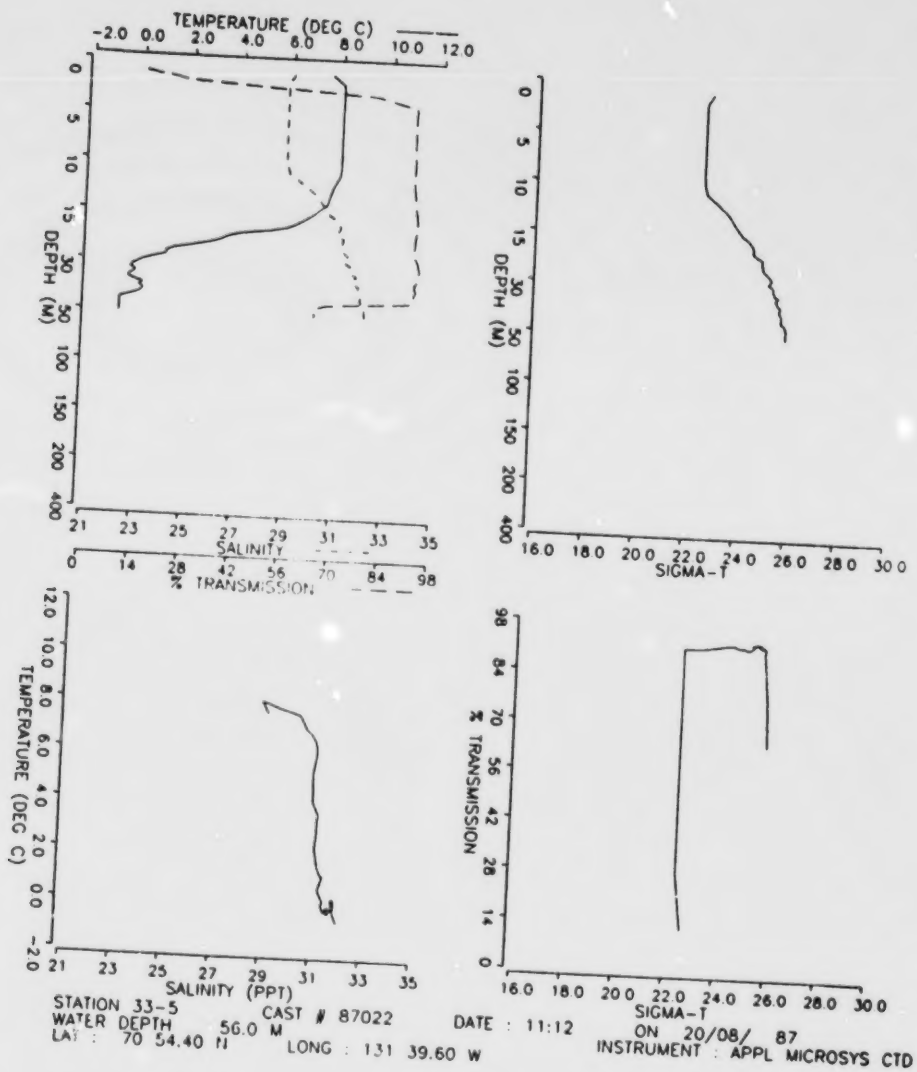
STATION 32-5 LAT 70 38.5 N 131 LONG 22.1 W 10:41 PDT ON 01/01/ 80 DATE

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.67	28.02	89.2	0.46	21.84	9.20	0.06
2.0	7.67	28.01	89.4	0.45	21.84	9.20	0.12
3.0	7.77	28.42	89.4	0.45	22.15	9.32	0.18
4.0	7.77	28.99	89.3	0.45	22.59	9.36	0.23
5.0	7.41	29.38	90.5	0.40	22.94	9.02	0.29
6.0	7.22	29.88	91.1	0.37	23.36	8.85	0.33
7.0	6.85	30.22	91.6	0.35	23.67	8.50	0.38
8.0	6.42	30.48	91.8	0.34	23.93	8.09	0.42
9.0	6.22	30.72	91.8	0.34	24.15	7.90	0.46
10.0	6.18	30.90	91.8	0.34	24.29	7.87	0.50
12.0	5.07	31.10	91.7	0.35	24.58	6.78	0.57
14.0	3.24	31.15	91.2	0.37	24.79	4.95	0.63
16.0	2.47	31.30	91.5	0.36	24.97	4.19	0.69
18.0	1.60	31.44	91.5	0.36	25.15	3.34	0.75
20.0	1.26	31.53	91.8	0.34	25.24	3.00	0.81
22.0	1.25	31.60	91.7	0.35	25.30	3.00	0.86
24.0	0.90	31.65	92.0	0.34	25.36	2.65	0.92
26.0	0.19	31.94	90.0	0.42	25.63	1.96	0.97
28.0	0.26	32.04	88.6	0.48	25.71	2.04	1.01
30.0	0.07	32.08	71.2	1.36	25.75	1.85	1.06
35.0	-0.03	32.09	60.4	2.01	25.76	1.75	1.17



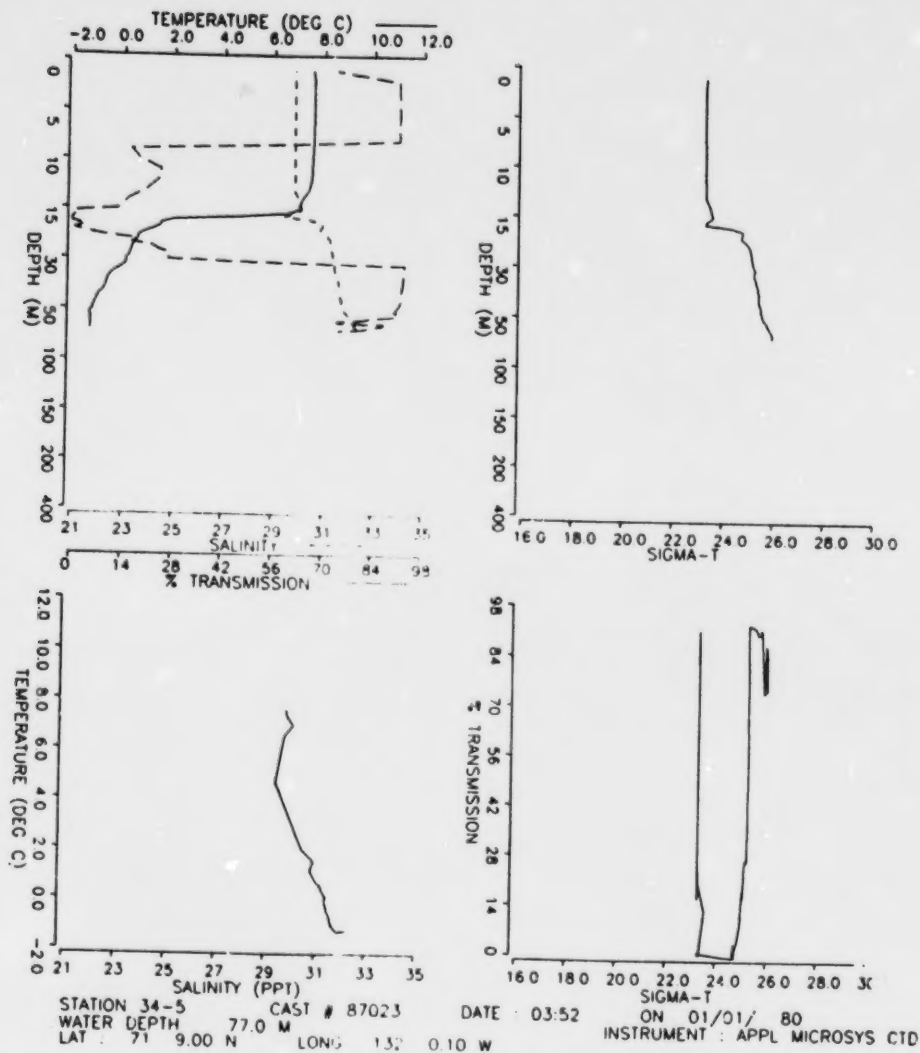
STATION 33-5 LAT 70 54.4 N 131 LONG 39.6 W DATE 11:12 PDT ON 20/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.56	29.05	12.0	8.49	22.67	9.15	0.05
2.0	8.04	28.82	27.6	5.15	22.42	9.61	0.11
3.0	8.03	28.82	79.8	0.90	22.42	9.61	0.16
4.0	8.03	28.81	90.8	0.39	22.41	9.61	0.22
5.0	8.02	28.81	90.7	0.39	22.42	9.60	0.27
6.0	8.02	28.81	90.7	0.39	22.42	9.60	0.32
7.0	8.02	28.82	90.7	0.39	22.42	9.60	0.38
8.0	8.02	28.82	90.7	0.39	22.42	9.59	0.43
9.0	8.01	28.82	90.8	0.39	22.43	9.59	0.49
10.0	8.02	28.84	90.8	0.39	22.44	9.60	0.54
12.0	7.78	29.54	90.8	0.39	23.02	9.40	0.65
14.0	7.51	30.35	91.5	0.36	23.69	9.17	0.74
16.0	6.74	30.87	92.0	0.33	24.20	8.44	0.82
18.0	6.26	31.07	92.1	0.33	24.42	7.97	0.89
20.0	5.26	30.96	91.8	0.34	24.45	6.96	0.96
22.0	3.57	31.21	91.5	0.36	24.81	5.29	1.03
24.0	2.86	31.18	91.3	0.37	24.85	4.58	1.09
26.0	1.47	31.25	91.1	0.37	25.00	3.20	1.15
28.0	1.11	31.48	92.3	0.32	25.21	2.85	1.21
30.0	0.17	31.52	92.6	0.31	25.29	1.87	1.27
35.0	-0.19	31.60	92.3	0.32	25.37	1.57	1.40
40.0	0.04	31.85	91.7	0.34	25.57	1.81	1.52
45.0	-0.68	32.07	76.4	1.08	25.77	1.11	1.64
50.0	-0.71	32.14	64.0	1.79	25.82	1.08	1.75
52.0	-0.71	32.13	63.6	1.81	25.82	1.08	1.79



STATION 34-5 LAT 71 9.0 N 132 LONG 0.1 W 03:52 PDT ON DATE 01/01/ 80

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.54	29.82	73.4	1.24	23.27	9.17	0.05
2.0	7.57	29.81	91.0	0.38	23.26	9.20	0.09
3.0	7.57	29.81	91.1	0.37	23.26	9.20	0.14
4.0	7.57	29.81	91.2	0.37	23.26	9.20	0.19
5.0	7.58	29.82	91.2	0.37	23.26	9.21	0.23
6.0	7.57	29.82	91.2	0.37	23.26	9.21	0.28
7.0	7.57	29.81	91.2	0.37	23.26	9.20	0.33
8.0	7.56	29.83	91.2	0.37	23.27	9.19	0.37
9.0	7.55	29.82	15.9	7.36	23.27	9.19	0.42
10.0	7.53	29.83	18.4	6.78	23.28	9.16	0.46
12.0	7.48	29.85	23.8	5.75	23.30	9.12	0.56
14.0	7.10	29.99	15.4	7.49	23.46	8.74	0.65
16.0	6.51	29.75	0.3	23.92	23.35	8.14	0.74
18.0	1.98	30.48	-0.2	36.84	24.35	3.65	0.83
20.0	1.43	30.92	3.6	13.27	24.74	3.13	0.89
22.0	0.76	31.02	3.7	13.19	24.86	2.47	0.96
24.0	0.55	31.25	18.1	6.84	25.05	2.27	1.02
26.0	0.34	31.29	22.0	6.05	25.10	2.07	1.07
28.0	0.25	31.34	26.5	5.31	25.14	1.99	1.13
30.0	0.08	31.43	26.3	5.34	25.22	1.82	1.19
35.0	-0.38	31.49	92.7	0.30	25.29	1.57	1.33
40.0	-0.69	31.62	92.3	0.32	25.40	1.07	1.46
45.0	-1.02	31.69	92.0	0.34	25.47	0.75	1.59
50.0	-1.19	31.83	90.4	0.41	25.59	0.58	1.71
55.0	-1.32	31.99	91.1	0.37	25.72	0.47	1.83
60.0	-1.28	32.13	76.3	1.08	25.84	0.52	1.94
65.0	-1.27	32.25	86.4	0.58	25.93	0.54	2.04
70.0	-1.28	32.30	74.1	1.20	25.97	0.54	2.15



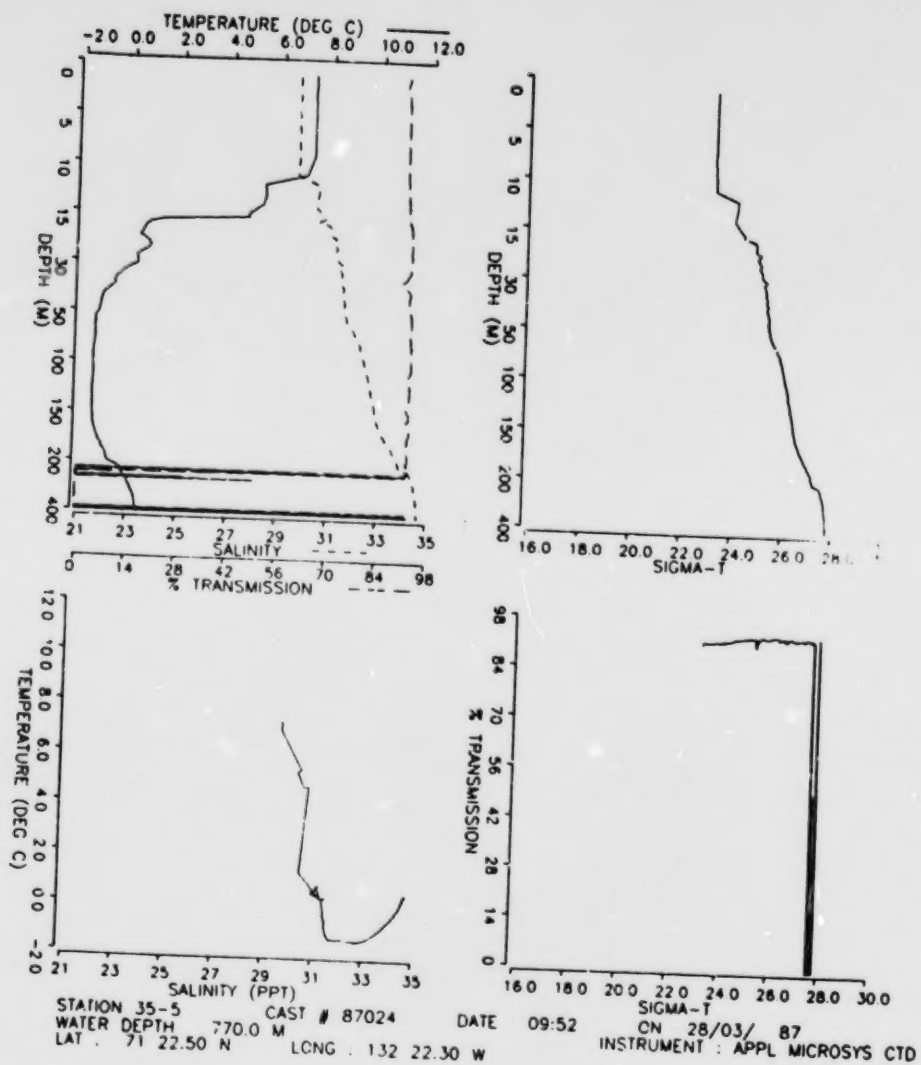
STATION
35-5

LAT
71 22.5 N 132

LONG
22.3 W

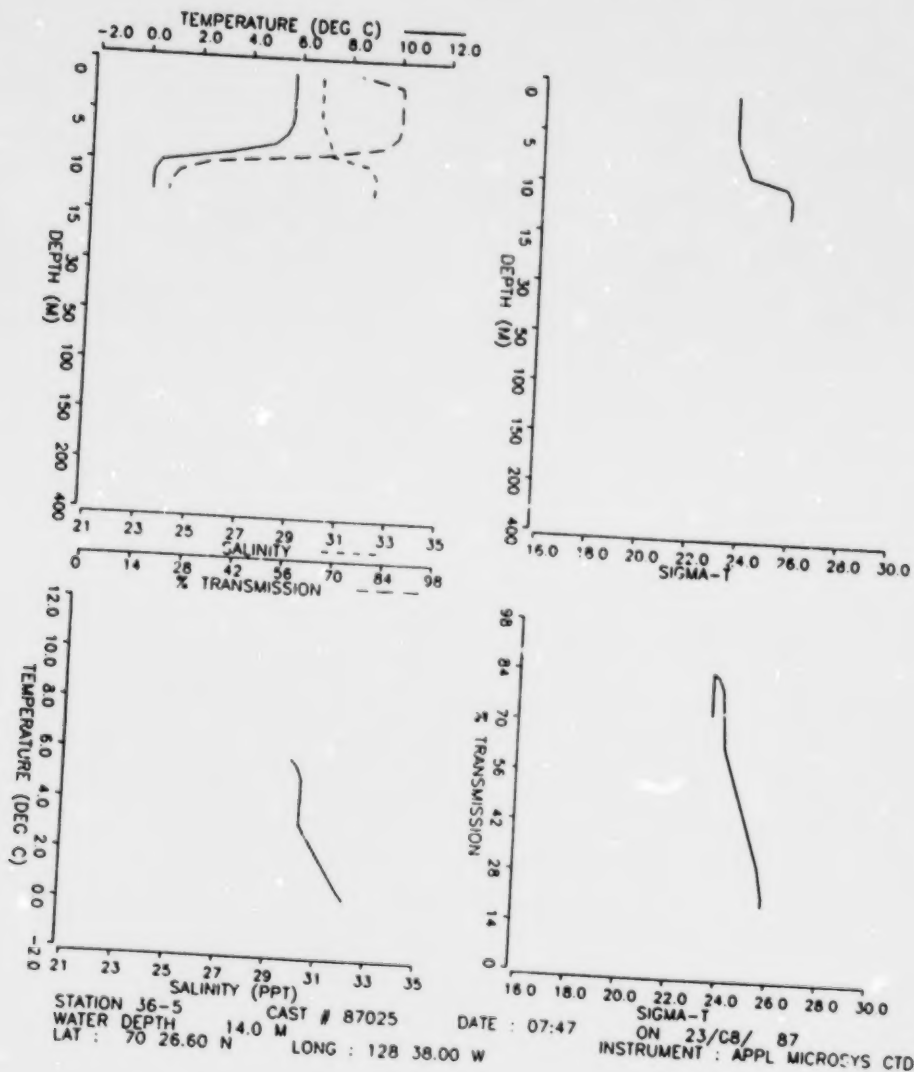
DATE
09:52 PDT ON 28/03/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.28	29.65	91.2	0.37	23.17	8.90	0.05
2.0	7.27	29.65	90.5	0.40	23.18	8.89	0.09
3.0	7.26	29.66	91.3	0.37	23.18	8.88	0.14
4.0	7.27	29.66	91.3	0.36	23.18	8.89	0.19
5.0	7.27	29.65	91.3	0.36	23.17	8.90	0.24
6.0	7.27	29.65	91.3	0.36	23.18	8.89	0.28
7.0	7.27	29.66	91.3	0.36	23.18	8.90	0.33
8.0	7.28	29.65	91.3	0.36	23.17	8.90	0.38
9.0	7.27	29.67	91.4	0.36	23.19	8.90	0.43
10.0	7.12	29.65	91.3	0.36	23.19	8.75	0.47
12.0	5.32	30.50	91.5	0.36	24.08	7.00	0.56
14.0	5.25	30.34	91.7	0.35	23.95	6.92	0.64
16.0	4.70	30.76	91.8	0.34	24.35	6.39	0.72
18.0	0.73	30.93	92.6	0.31	24.79	2.44	0.79
20.0	0.51	30.99	92.7	0.30	24.84	2.22	0.85
22.0	0.35	31.23	92.8	0.30	25.05	2.07	0.91
24.0	0.72	31.19	92.8	0.30	25.00	2.44	0.97
26.0	0.68	31.17	92.6	0.31	24.99	2.40	1.03
28.0	0.25	31.28	92.8	0.30	25.10	1.98	1.09
30.0	0.27	31.55	92.9	0.30	25.31	2.02	1.14
35.0	-0.39	31.45	91.3	0.36	25.26	1.36	1.28
40.0	-0.70	31.56	92.5	0.31	25.35	1.06	1.42
45.0	-1.12	31.60	92.2	0.32	25.40	0.64	1.55
50.0	-1.25	31.65	92.9	0.30	25.44	0.52	1.68
55.0	-1.36	31.71	93.0	0.29	25.50	0.42	1.80
60.0	-1.37	31.81	93.0	0.29	25.58	0.42	1.93
65.0	-1.39	31.95	92.7	0.30	25.69	0.41	2.04
70.0	-1.37	32.08	92.8	0.30	25.79	0.44	2.16
75.0	-1.37	32.18	93.0	0.29	25.88	0.45	2.26
80.0	-1.39	32.25	93.1	0.29	25.93	0.44	2.37
85.0	-1.40	32.31	93.1	0.28	25.98	0.43	2.47
90.0	-1.42	32.37	93.2	0.28	26.03	0.42	2.57
95.0	-1.42	32.43	93.2	0.28	26.08	0.42	2.67
100.0	-1.43	32.46	92.2	0.28	26.11	0.42	2.77
110.0	-1.40	32.60	92.4	0.32	26.22	0.47	2.95
120.0	-1.43	32.67	93.0	0.29	26.28	0.45	3.13
130.0	-1.44	32.75	92.8	0.30	26.34	0.45	3.30
140.0	-1.42	32.86	92.3	0.32	26.43	0.48	3.46
150.0	-1.43	32.94	92.6	0.31	26.49	0.49	3.62
175.0	-1.22	33.37	92.3	0.32	26.84	0.74	3.97
200.0	-0.76	33.91	92.8	0.30	27.26	1.25	4.21
225.0	-0.27	34.34	92.3	0.32	27.58	1.78	4.37
250.0	-0.15	34.41	-0.1	36.84	27.64	1.92	4.48
300.0	0.16	34.56	-0.1	36.84	27.74	2.27	4.68
350.0	0.37	34.64	-0.1	36.84	27.80	2.52	4.84
400.0	0.44	34.67	92.4	0.32	27.81	2.63	4.98



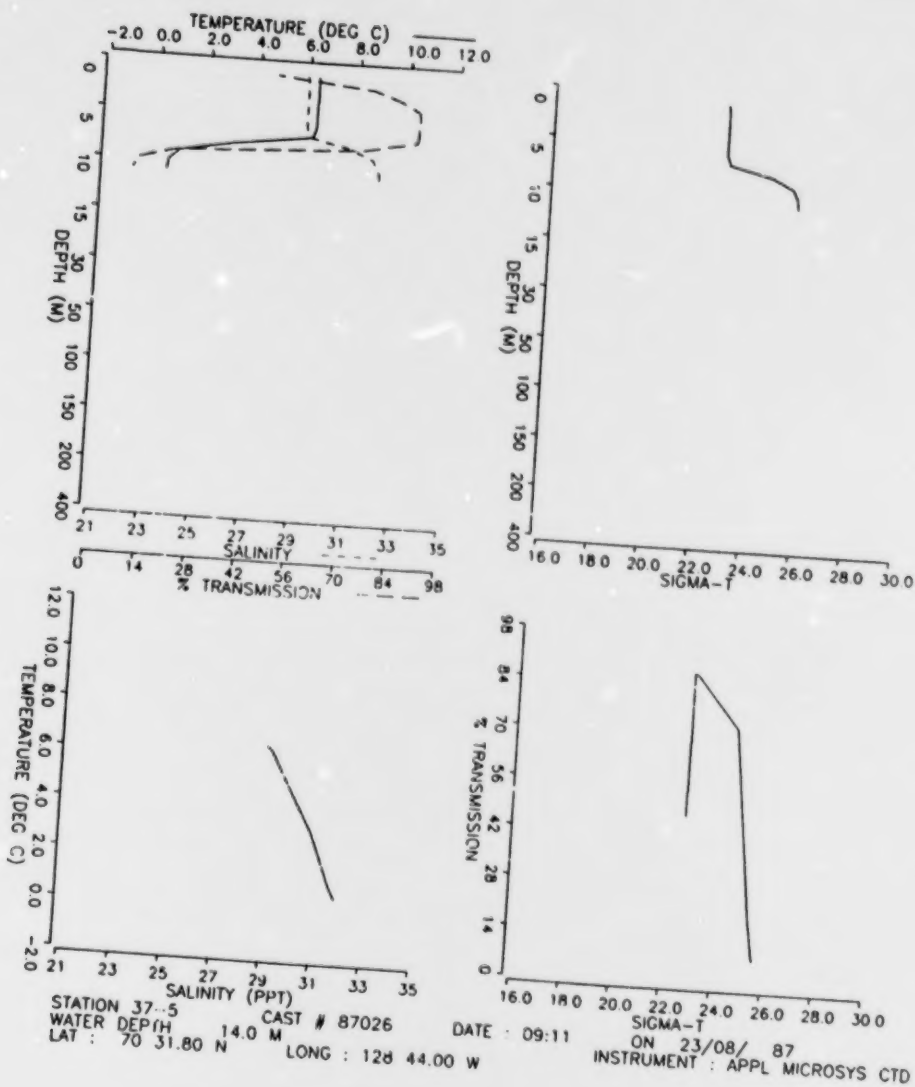
STATION 36-5 LAT 70 26.6 N LONG 128 38.0 W DATE 07:47 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.75	29.83	72.5	1.29	23.50	7.38	0.04
2.0	5.75	29.83	84.4	0.68	23.50	7.38	0.09
3.0	5.75	29.83	84.5	0.67	23.50	7.38	0.13
4.0	5.74	29.83	84.5	0.68	23.50	7.37	0.18
5.0	5.74	29.84	84.4	0.68	23.51	7.37	0.22
6.0	5.67	29.89	84.3	0.68	23.56	7.31	0.27
7.0	5.47	30.07	83.5	0.72	23.72	7.12	0.31
8.0	5.00	30.23	80.2	0.88	23.90	6.66	0.35
9.0	3.18	30.22	63.5	1.82	24.06	4.83	0.39
10.0	0.55	31.84	31.1	4.67	25.53	2.30	0.42
12.0	0.23	32.07	20.7	6.30	25.73	2.00	0.47
13.0	0.23	32.05	19.9	6.46	25.72	2.00	0.49



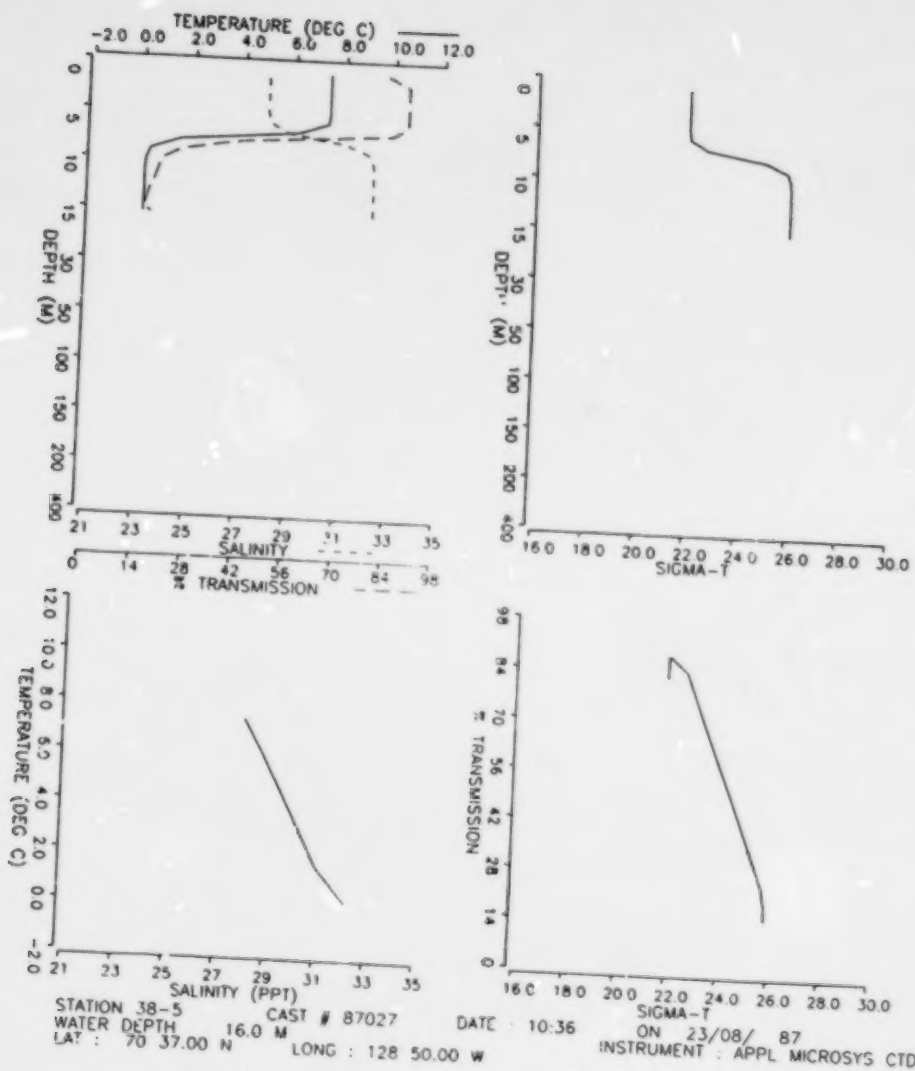
STATION 37-5 LAT 70 31.8 N LONG 128 44.0 W DATE 09:11 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.36	28.92	46.9	3.03	22.71	7.94	0.05
2.0	6.36	28.96	74.4	1.18	22.75	7.94	0.10
3.0	6.35	28.96	82.2	0.78	22.75	7.93	0.16
4.0	6.35	28.96	86.9	0.56	22.75	7.93	0.21
5.0	6.35	28.96	87.0	0.56	22.75	7.93	0.26
6.0	6.35	28.96	86.9	0.56	22.74	7.93	0.31
7.0	6.21	29.12	86.7	0.57	22.88	7.80	0.36
8.0	3.07	30.82	72.0	1.31	24.54	4.76	0.40
9.0	0.88	31.67	18.8	6.69	25.38	2.62	0.43
10.0	0.46	31.90	8.9	9.69	25.58	2.22	0.46
11.0	0.42	31.93	7.6	10.33	25.61	2.17	0.48



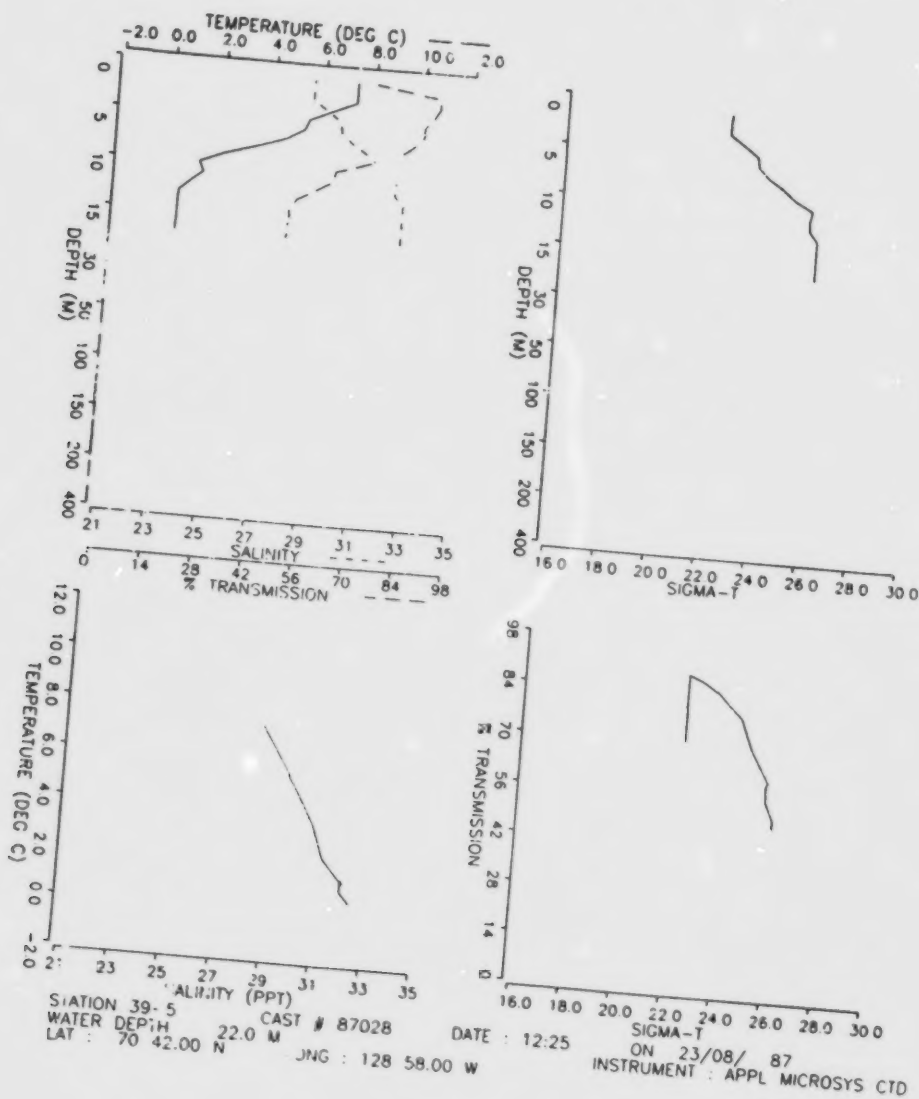
STATION 38-5 LAT 70 37.0 N LONG 128 50.0 W DATE 10:36 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.40	27.92	81.9	0.80	21.80	8.92	0.06
2.0	7.40	27.93	87.8	0.52	21.81	8.92	0.12
3.0	7.39	27.93	87.8	0.52	21.81	8.92	0.18
4.0	7.39	27.93	87.8	0.52	21.81	8.92	0.24
5.0	7.39	27.94	87.9	0.52	21.81	8.91	0.30
6.0	7.33	27.99	87.8	0.52	21.86	8.86	0.36
7.0	6.14	28.66	83.7	0.71	22.53	7.70	0.42
8.0	1.48	31.03	41.4	3.53	24.82	3.18	0.46
9.0	0.28	32.03	24.4	5.64	25.70	2.04	0.49
10.0	0.11	32.18	19.2	6.60	25.83	1.88	0.51
12.0	0.07	32.20	17.3	7.01	25.84	1.85	0.56
14.0	0.06	32.20	15.0	7.58	25.84	1.84	0.60
16.0	0.06	32.20	16.6	7.18	25.84	1.83	0.64



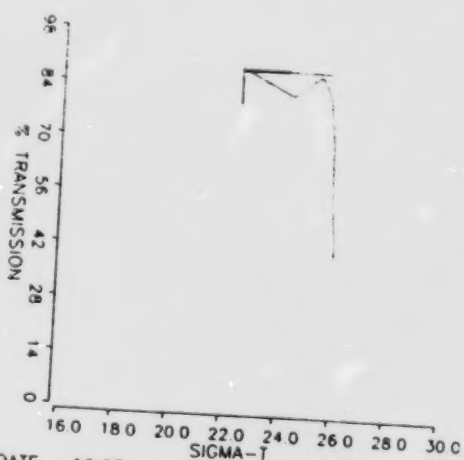
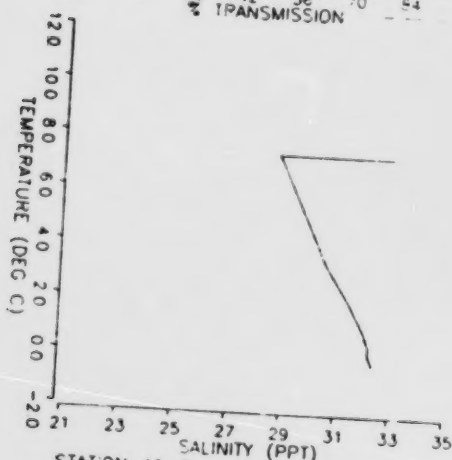
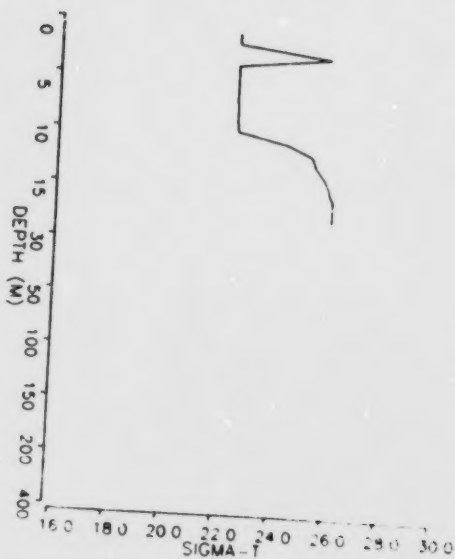
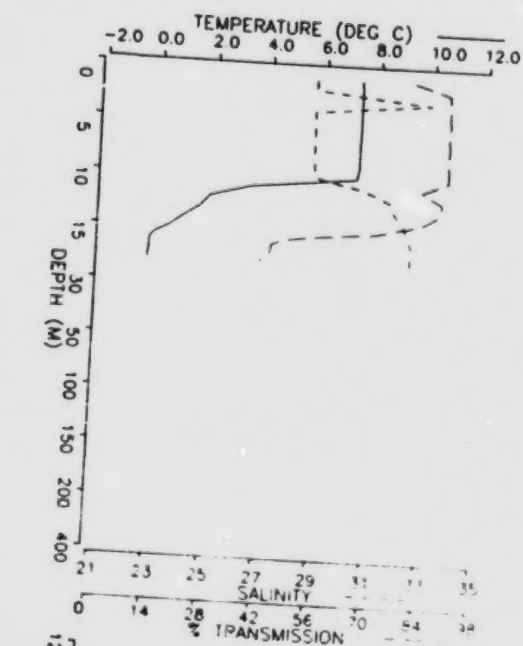
STATION 39-5 LAT 70 42.0 N LONG 128 58.0 W DATE 12:25 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.27	28.56	70.1	1.42	22.31	8.83	0.06
2.0	7.27	28.55	88.2	0.50	22.31	8.83	0.11
3.0	7.27	28.55	88.6	0.48	22.31	8.83	0.17
4.0	6.33	29.18	86.9	0.56	22.90	7.92	0.22
5.0	5.43	29.71	84.5	0.67	23.43	7.06	0.27
6.0	5.27	29.75	84.5	0.67	23.49	6.90	0.31
7.0	4.60	30.16	81.7	0.81	23.88	6.26	0.35
8.0	3.47	30.80	77.7	1.01	24.49	5.16	0.39
9.0	2.12	31.27	69.2	1.47	24.97	3.84	0.42
10.0	1.17	32.11	60.4	2.02	25.71	2.93	0.45
12.0	0.86	32.03	55.3	2.37	25.66	2.63	0.50
14.0	0.40	32.40	48.1	2.93	25.99	2.19	0.54
16.0	0.39	32.40	48.0	2.93	25.99	2.18	0.58
18.0	0.39	32.40	48.1	2.93	25.99	2.18	0.62
20.0	0.39	32.40	47.7	2.96	25.99	2.17	0.66
21.0	0.38	32.40	47.6	2.97	25.99	2.17	0.68



STATION 40-5 LAT 70 47.0 N 129 LONG 2.5 W 16:27 PDT ON DATE 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.32	28.63	78.6	0.95	22.36	8.88	0.06
2.0	7.33	28.63	88.0	0.51	22.37	8.89	0.11
3.0	7.33	32.90	88.2	0.50	25.72	9.14	0.15
4.0	7.33	28.63	88.3	0.50	22.36	8.90	0.19
5.0	7.33	28.63	88.4	0.50	22.36	8.90	0.24
6.0	7.33	28.63	88.2	0.50	22.37	8.89	0.30
7.0	7.32	28.64	88.4	0.49	22.37	8.89	0.35
8.0	7.31	28.65	88.3	0.50	22.38	8.88	0.41
9.0	7.31	28.65	88.3	0.50	22.39	8.87	0.46
10.0	7.25	28.69	88.4	0.49	22.43	8.82	0.52
12.0	1.87	31.47	86.9	0.56	25.15	3.60	0.60
14.0	0.93	31.97	82.2	0.79	25.61	2.68	0.65
16.0	0.11	32.19	58.5	2.15	25.83	1.88	0.69
18.0	-0.24	32.33	45.0	3.20	25.96	1.55	0.74
20.0	-0.27	32.33	43.1	3.37	25.96	1.52	0.78
22.0	-0.29	32.33	41.7	3.50	25.96	1.50	0.82
24.0	-0.30	32.33	40.1	3.65	25.97	1.49	0.86



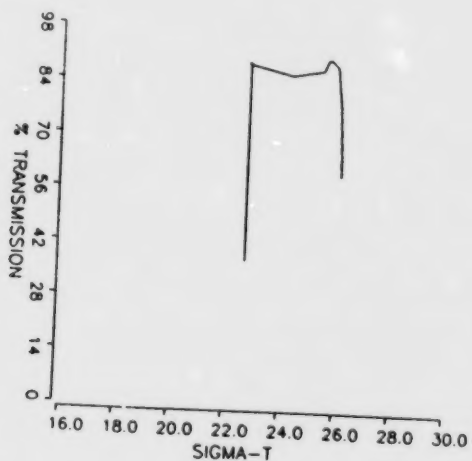
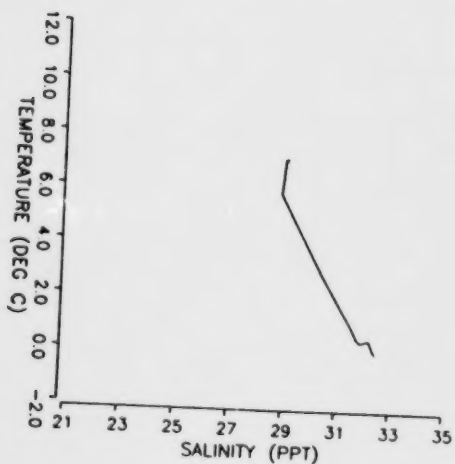
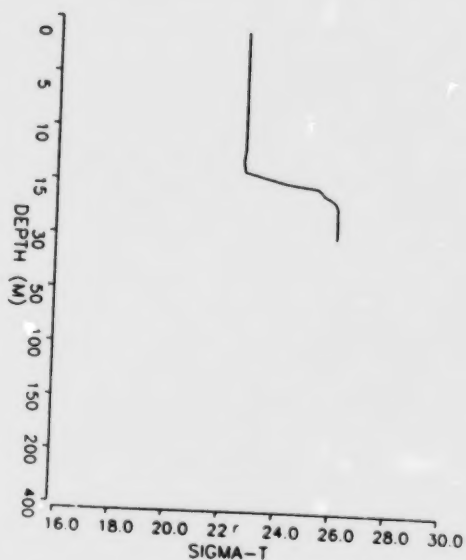
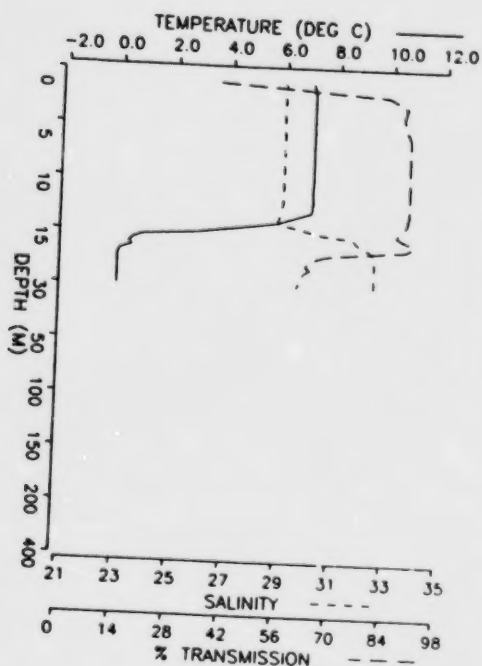
STATION 40-5
WATER DEPTH 25.0 M
LAT 70 47.00 N
LONG 129 2.50 W

DATE : 16:27

SIGMA-T
ON 23/08/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION 41-5 LAT 70 57.5 N LONG 129 16.0 W DATE 18:28 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.00	28.96	37.4	3.93	22.66	8.58	0.05
2.0	7.09	28.97	82.9	0.75	22.66	8.67	0.10
3.0	7.09	28.97	87.7	0.52	22.66	8.67	0.16
4.0	7.09	28.97	86.9	0.56	22.66	8.67	0.21
5.0	7.09	28.97	87.7	0.53	22.66	8.67	0.26
6.0	7.08	28.97	88.8	0.48	22.67	8.67	0.31
7.0	7.08	28.97	88.8	0.48	22.67	8.67	0.37
8.0	7.08	28.98	88.7	0.48	22.67	8.67	0.42
9.0	7.08	28.98	88.8	0.47	22.67	8.67	0.47
10.0	7.08	28.98	88.9	0.47	22.67	8.66	0.52
12.0	7.08	28.98	88.9	0.47	22.67	8.67	0.63
14.0	5.77	28.79	88.5	0.49	22.67	7.35	0.73
16.0	0.80	31.60	87.2	0.55	25.32	2.54	0.81
18.0	0.34	31.87	90.2	0.41	25.57	2.10	0.86
20.0	0.03	32.36	77.5	1.02	25.98	1.82	0.90
22.0	-0.07	32.45	64.2	1.77	26.05	1.73	0.94
24.0	-0.07	32.45	62.1	1.91	26.05	1.72	0.98
26.0	-0.07	32.45	61.6	1.94	26.05	1.72	1.02
28.0	-0.08	32.45	60.5	2.01	26.05	1.72	1.06
30.0	-0.07	32.45	59.8	2.06	26.05	1.72	1.10



STATION 41-5

CAST # 87031

DATE : 18:28

ON 23/08/ 87

WATER DEPTH

34.0 M

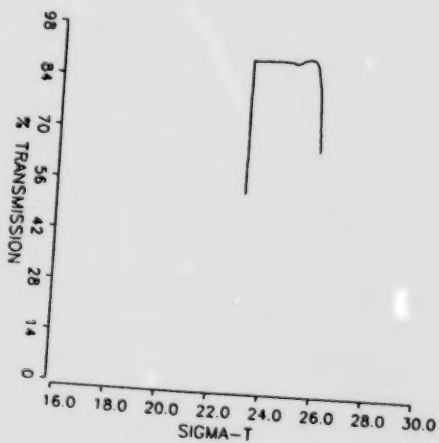
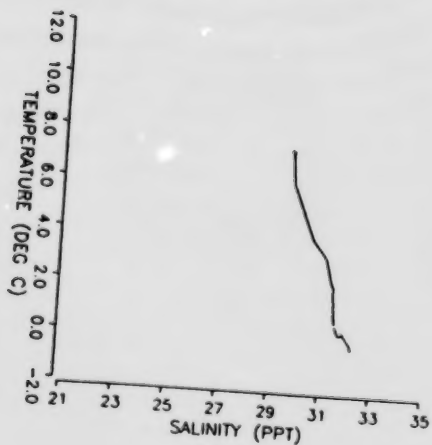
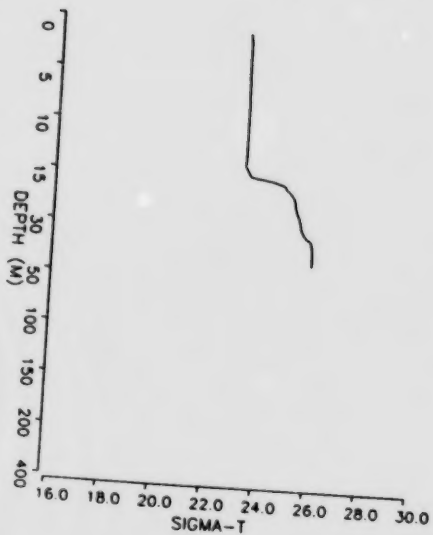
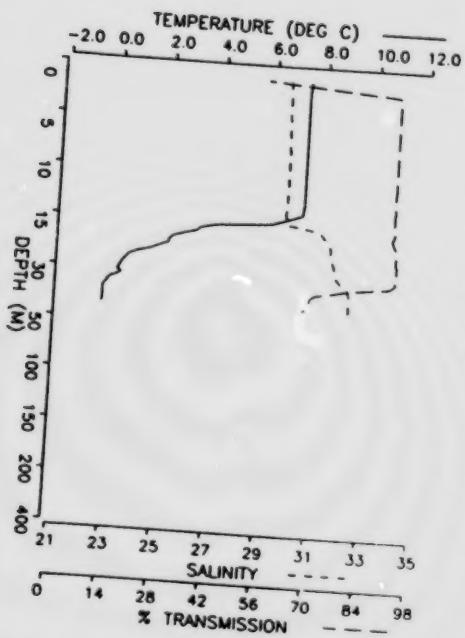
INSTRUMENT : APPL MICROSYS CTD

LAT : 70 57.50 N

LONG : 129 16.10 W

STATION 42-5 LAT 70 12.8 N LONG 129 36.5 W DATE 03:36 PDT ON 01/01/ 80

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.35	29.56	57.8	2.48	23.09	8.96	0.05
2.0	7.32	29.59	90.0	0.42	23.12	8.94	0.10
3.0	7.32	29.59	90.1	0.42	23.12	8.94	0.14
4.0	7.32	29.60	90.1	0.42	23.13	8.94	0.19
5.0	7.32	29.60	90.1	0.42	23.13	8.94	0.24
6.0	7.32	29.61	90.1	0.42	23.14	8.94	0.29
7.0	7.32	29.63	90.1	0.42	23.15	8.94	0.34
8.0	7.31	29.64	90.1	0.42	23.16	8.94	0.38
9.0	7.31	29.64	90.1	0.42	23.16	8.94	0.43
10.0	7.31	29.64	90.1	0.42	23.16	8.94	0.48
12.0	7.31	29.64	90.1	0.42	23.16	8.94	0.57
14.0	7.27	29.61	90.1	0.42	23.15	8.89	0.67
16.0	3.90	30.56	90.3	0.41	24.26	5.58	0.76
18.0	3.18	31.11	89.6	0.44	24.77	4.89	0.82
20.0	2.25	31.34	90.4	0.40	25.02	3.98	0.88
22.0	2.10	31.44	90.9	0.38	25.12	3.83	0.94
24.0	1.42	31.48	90.8	0.39	25.19	3.16	1.00
26.0	0.61	31.55	91.1	0.37	25.29	2.36	1.05
28.0	0.38	31.62	91.2	0.37	25.36	2.13	1.11
30.0	0.23	31.69	90.8	0.39	25.43	1.98	1.16
35.0	-0.17	32.17	77.1	1.04	25.83	1.62	1.28
40.0	-0.35	32.23	67.9	1.55	25.89	1.45	1.39
44.0	-0.35	32.23	66.0	1.66	25.88	1.44	1.47



STATION 42-5

WATER DEPTH 42.0 M

LAT : 70 12.80 N

CAST # 87032

DATE 03:36

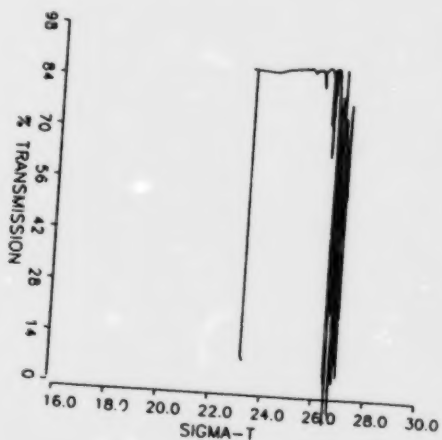
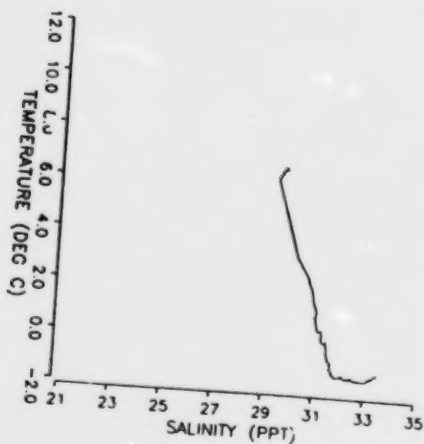
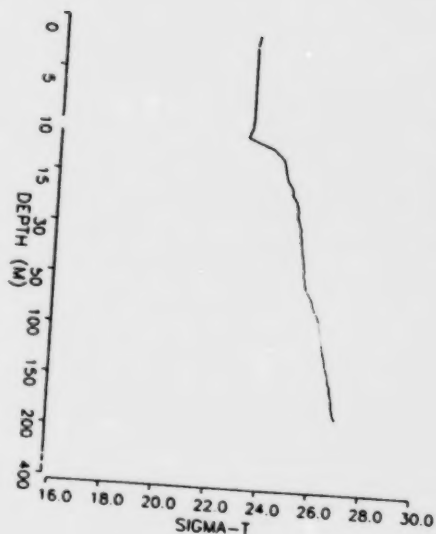
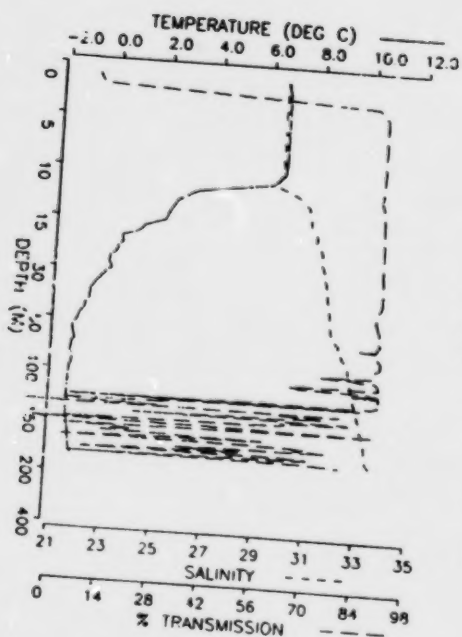
ON 01/01/ 80

INSTRUMENT : APPL MICROSYS CTD

LONG : 129 36.50 W

STATION
43-5LAT
71 31.6 N 130LONG
0.7 WDATE
01:49 PDT ON 25/08/ 87

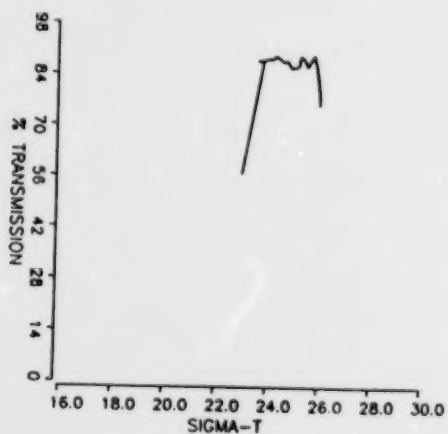
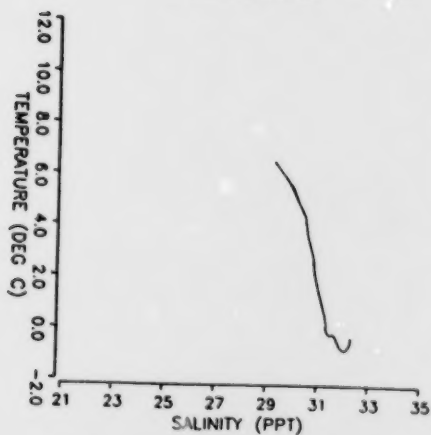
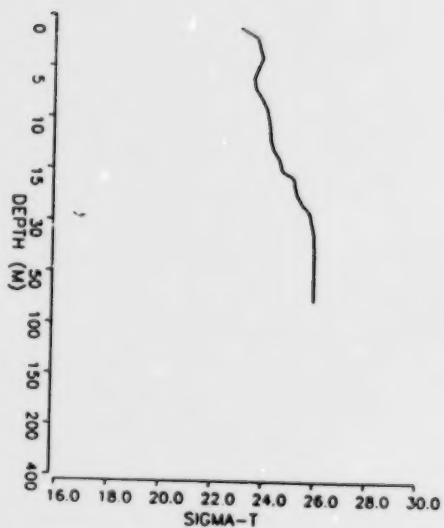
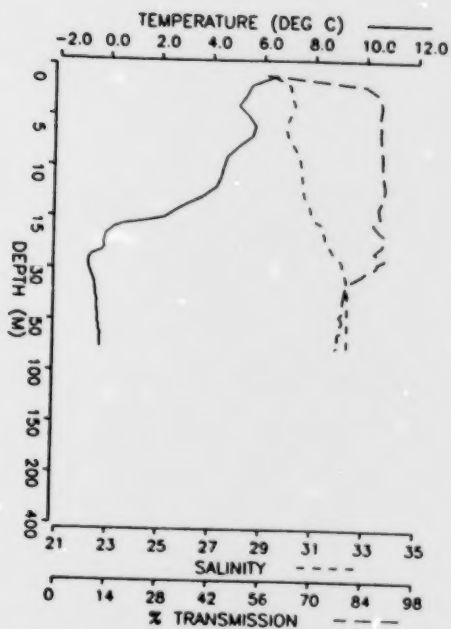
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.55	29.63	8.2	10.01	23.25	8.16	0.05
2.0	6.68	29.57	9.5	9.40	23.18	8.30	0.09
3.0	6.68	29.56	85.2	0.64	23.18	8.30	0.14
4.0	6.69	29.56	87.6	0.53	23.18	8.30	0.19
5.0	6.69	29.57	87.7	0.52	23.18	8.31	0.24
6.0	6.68	29.56	87.7	0.52	23.18	8.30	0.28
7.0	6.68	29.57	87.7	0.52	23.18	8.30	0.33
8.0	6.68	29.57	87.7	0.52	23.18	8.30	0.38
9.0	6.68	29.57	87.8	0.52	23.18	8.30	0.42
10.0	6.63	29.54	87.7	0.52	23.17	8.25	0.47
12.0	3.22	30.20	87.2	0.55	24.04	4.88	0.56
14.0	2.21	30.73	88.3	0.50	24.54	3.90	0.64
16.0	1.57	30.91	88.4	0.49	24.73	3.27	0.70
18.0	1.11	31.04	88.2	0.50	24.85	2.82	0.77
20.0	0.40	31.10	88.5	0.49	24.94	2.11	0.83
22.0	0.44	31.24	88.5	0.49	25.05	2.16	0.89
24.0	0.23	31.29	88.7	0.48	25.10	1.95	0.95
26.0	-0.02	31.29	88.7	0.48	25.11	1.71	1.00
28.0	-0.09	31.38	88.5	0.49	25.19	1.65	1.06
30.0	0.03	31.44	88.8	0.48	25.23	1.77	1.11
35.0	-0.51	31.51	88.9	0.47	25.31	1.24	1.25
40.0	-0.75	31.61	88.5	0.49	25.40	1.01	1.38
45.0	-0.93	31.69	87.5	0.53	25.47	0.84	1.51
50.0	-1.18	31.74	88.4	0.49	25.51	0.60	1.64
55.0	-1.29	31.79	88.5	0.49	25.56	0.49	1.76
60.0	-1.38	31.93	88.8	0.47	25.68	0.41	1.88
65.0	-1.33	32.06	88.0	0.51	25.78	0.47	1.99
70.0	-1.29	32.14	88.5	0.49	25.84	0.52	2.10
75.0	-1.38	32.21	88.4	0.49	25.90	0.44	2.21
80.0	-1.41	32.35	89.2	0.46	26.01	0.42	2.31
85.0	-1.39	32.46	88.9	0.47	26.11	0.45	2.41
90.0	-1.33	32.50	87.2	0.55	26.13	0.51	2.50
95.0	-1.37	32.52	73.4	1.24	26.16	0.49	2.60
100.0	-1.43	32.57	88.7	0.48	26.20	0.43	2.69
110.0	-1.44	32.67	86.7	0.57	26.28	0.44	2.87
120.0	-1.46	32.77	89.1	0.46	26.36	0.42	3.04
130.0	-1.47	32.87	11.7	8.58	26.44	0.43	3.20
140.0	-1.46	33.02	22.2	6.02	26.56	0.45	3.35
150.0	-1.42	33.14	38.2	3.85	26.66	0.51	3.49
175.0	-1.29	33.35	22.3	6.00	26.82	0.67	3.82
184.0	-1.18	33.52	79.4	0.92	26.96	0.75	3.92



STATION 43-5 CAST # 87033 DATE : 01:49 ON 25/08/ 87
 WATER DEPTH 195.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 71 31.60 N LONG : 130 0.70 W

STATION 45-5 LAT 70 38.9 N LONG 127 45.4 W DATE 14:01 PDT ON 21/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.52	29.27	56.6	2.28	22.97	8.12	0.05
2.0	5.51	30.00	83.7	0.71	23.66	7.15	0.10
3.0	5.31	30.08	87.8	0.52	23.75	6.96	0.14
4.0	5.01	30.20	88.1	0.51	23.87	6.67	0.18
5.0	5.40	30.03	87.8	0.52	23.70	7.04	0.22
6.0	5.68	29.88	87.9	0.52	23.55	7.32	0.26
7.0	5.57	29.93	87.9	0.52	23.60	7.21	0.31
8.0	5.03	30.18	88.1	0.50	23.85	6.69	0.35
9.0	4.59	30.38	88.4	0.49	24.06	6.26	0.39
10.0	4.45	30.47	88.4	0.49	24.14	6.12	0.43
12.0	4.16	30.52	89.1	0.46	24.21	5.84	0.50
14.0	2.77	30.83	87.4	0.54	24.58	4.47	0.57
16.0	1.42	31.05	86.0	0.60	24.85	3.13	0.64
18.0	0.16	31.36	87.1	0.55	25.16	1.89	0.70
20.0	-0.14	31.40	89.1	0.46	25.21	1.60	0.76
22.0	-0.20	31.46	88.9	0.47	25.26	1.54	0.81
24.0	-0.19	31.66	87.4	0.54	25.41	1.56	0.86
26.0	-0.62	31.90	88.3	0.50	25.63	1.09	0.91
28.0	-0.82	32.08	87.2	0.55	25.78	0.96	0.96
30.0	-0.80	32.15	85.9	0.61	25.84	0.98	1.00
35.0	-0.60	32.28	79.6	0.91	25.94	1.20	1.11
40.0	-0.53	32.31	78.3	0.98	25.95	1.27	1.21
45.0	-0.47	32.31	77.7	1.01	25.95	1.33	1.32
50.0	-0.44	32.32	77.7	1.01	25.96	1.36	1.42
55.0	-0.39	32.32	77.6	1.02	25.96	1.42	1.52
60.0	-0.39	32.32	77.4	1.03	25.96	1.42	1.62
65.0	-0.33	32.32	76.3	1.08	25.96	1.49	1.73
70.0	-0.34	32.32	77.0	1.05	25.96	1.48	1.83
75.0	-0.34	32.32	76.9	1.05	25.96	1.49	1.93
77.0	-0.31	32.32	75.7	1.11	25.96	1.51	1.97



STATION 45-5 CAST # 87034 DATE : 14:01 ON 21/08/ 87
 WATER DEPTH 80.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 38.90 N LONG : 127 45.40 W

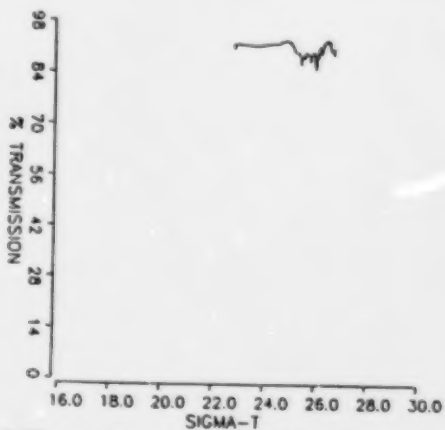
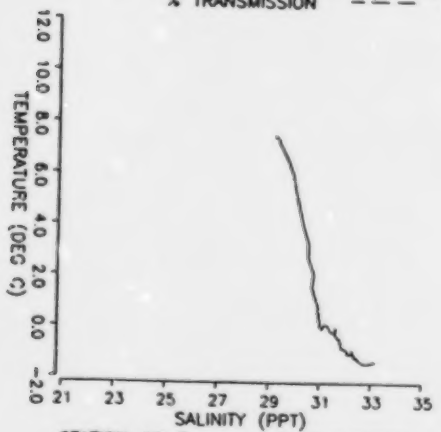
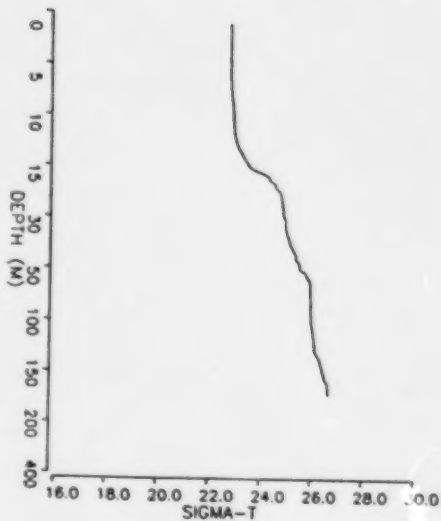
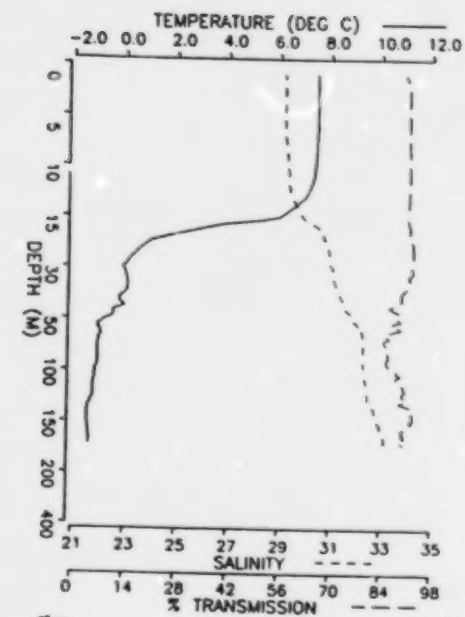
STATION
46-5

LAT
70 42.3 N

LONG
127 33.2 W

DATE
14:01 PDT ON 21/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.46	29.19	90.6	0.40	22.79	9.05	0.05
2.0	7.46	29.19	91.7	0.35	22.79	9.05	0.10
3.0	7.46	29.19	91.7	0.35	22.79	9.05	0.15
4.0	7.46	29.19	91.7	0.35	22.79	9.06	0.20
5.0	7.46	29.19	91.7	0.35	22.78	9.06	0.26
6.0	7.46	29.19	91.7	0.35	22.79	9.06	0.31
7.0	7.45	29.21	91.7	0.35	22.80	9.05	0.36
8.0	7.43	29.24	91.7	0.35	22.83	9.04	0.41
9.0	7.41	29.29	91.8	0.34	22.87	9.01	0.46
10.0	7.37	29.32	91.9	0.34	22.90	8.98	0.51
12.0	7.21	29.37	91.9	0.34	22.96	8.82	0.61
14.0	6.54	29.70	91.6	0.35	23.30	8.17	0.71
16.0	5.24	30.05	91.5	0.35	23.73	6.89	0.79
18.0	3.25	30.54	92.0	0.33	24.31	4.93	0.87
20.0	2.09	30.75	92.1	0.33	24.56	3.78	0.94
22.0	1.03	30.85	92.7	0.30	24.71	2.73	1.01
24.0	0.66	30.93	92.8	0.30	24.79	2.37	1.07
26.0	0.40	30.96	92.9	0.29	24.83	2.11	1.14
28.0	0.14	31.01	92.9	0.29	24.88	1.85	1.20
30.0	-0.10	31.07	92.5	0.31	24.94	1.62	1.26
35.0	0.08	31.15	92.4	0.32	25.00	1.80	1.41
40.0	-0.01	31.33	89.9	0.43	25.15	1.75	1.56
45.0	-0.02	31.62	86.2	0.59	25.38	1.74	1.69
50.0	-0.66	31.82	89.4	0.45	25.57	1.12	1.82
55.0	-1.03	32.07	89.0	0.47	25.78	0.77	1.93
60.0	-0.95	32.25	88.3	0.50	25.92	0.86	2.04
65.0	-0.91	32.29	85.6	0.62	25.95	0.91	2.14
70.0	-1.01	32.30	85.0	0.65	25.96	0.81	2.25
75.0	-1.05	32.31	85.6	0.62	25.97	0.77	2.35
80.0	-1.05	32.31	85.6	0.62	25.98	0.78	2.45
85.0	-1.05	32.32	86.0	0.60	25.98	0.78	2.55
90.0	-1.04	32.32	85.6	0.62	25.98	0.80	2.65
95.0	-1.07	32.33	86.4	0.58	25.99	0.77	2.76
100.0	-1.16	32.36	88.6	0.48	26.02	0.69	2.86
110.0	-1.20	32.42	88.5	0.49	26.07	0.66	3.05
120.0	-1.22	32.49	90.7	0.39	26.13	0.65	3.25
130.0	-1.31	32.55	90.0	0.42	26.18	0.57	3.43
140.0	-1.44	32.80	92.7	0.30	26.38	0.46	3.61
150.0	-1.42	32.92	92.4	0.31	26.48	0.50	3.77
172.0	-1.35	33.19	90.7	0.39	26.70	0.60	4.08



STATION 46-5 CAST # 87035
WATER DEPTH 186.0 M
LAT : 70 42.30 N LONG : 127 33.20 W

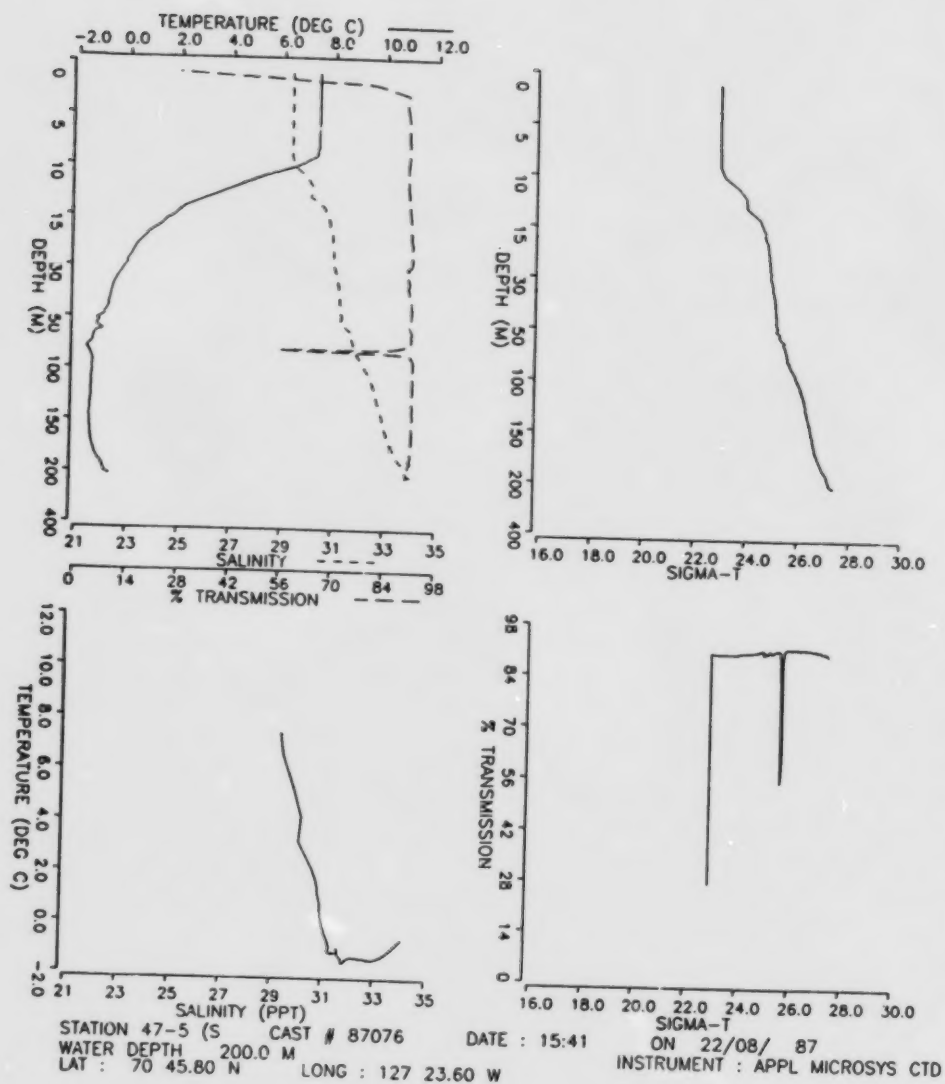
DATE : 14:01

ON 21/08/ 87

INSTRUMENT : APPL MICROSYS CTD

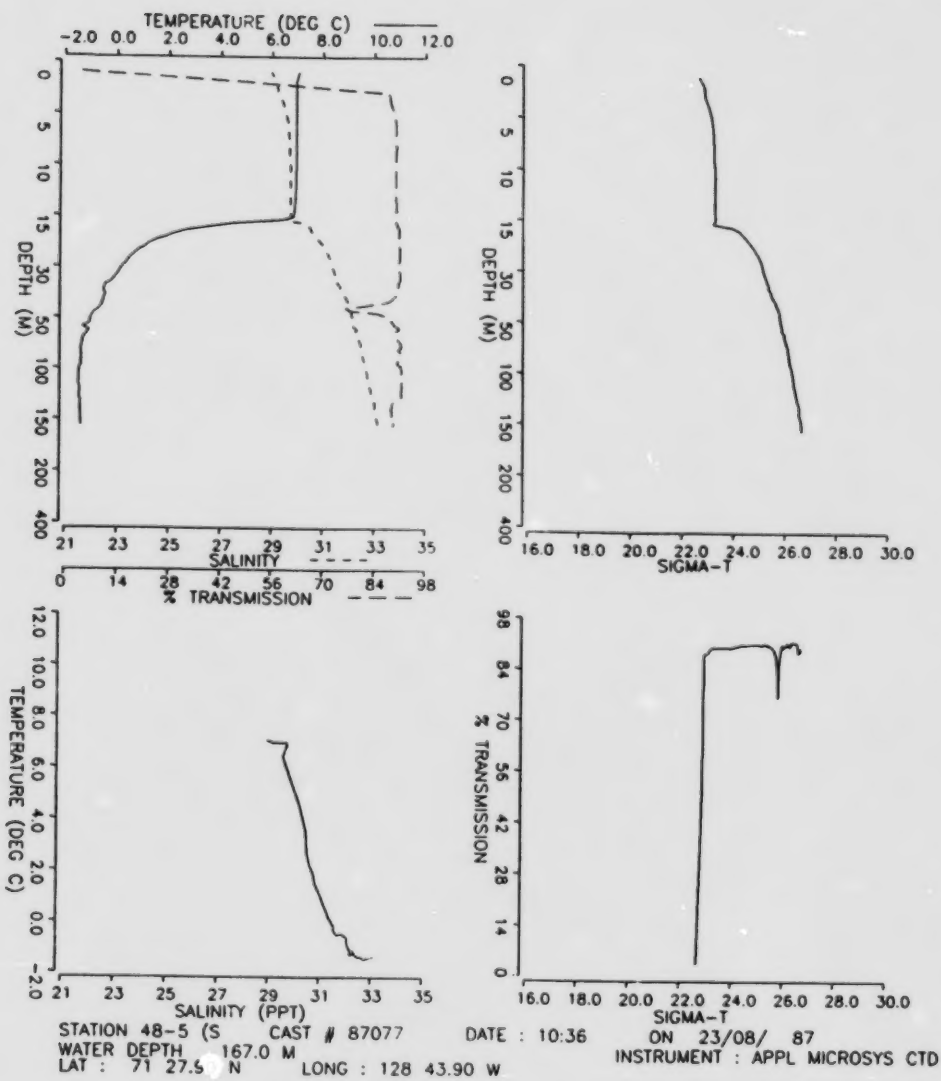
STATION LAT LONG DATE
47-5 (SS-1) 70 45.8 N 127 23.6 W 15:41 PDT ON 22/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.39	29.33	27.4	5.18	22.90	8.99	0.05
2.0	7.39	29.32	81.0	0.84	22.90	8.99	0.10
3.0	7.40	29.32	90.0	0.42	22.90	9.00	0.15
4.0	7.39	29.32	89.4	0.45	22.90	9.00	0.20
5.0	7.39	29.32	90.0	0.42	22.90	8.99	0.25
6.0	7.39	29.33	90.1	0.42	22.90	8.99	0.30
7.0	7.38	29.33	90.1	0.42	22.90	8.98	0.35
8.0	7.37	29.33	90.2	0.41	22.91	8.97	0.40
9.0	7.30	29.33	90.2	0.41	22.92	8.91	0.45
10.0	6.53	29.43	90.0	0.42	23.09	8.14	0.50
12.0	4.18	30.16	90.0	0.42	23.92	5.83	0.59
14.0	2.16	30.60	90.6	0.40	24.44	3.84	0.66
16.0	1.42	30.84	90.9	0.38	24.67	3.12	0.73
18.0	1.16	30.84	90.6	0.39	24.69	2.86	0.80
20.0	0.76	30.93	91.1	0.37	24.79	2.47	0.86
22.0	0.52	30.94	91.3	0.37	24.81	2.23	0.93
24.0	0.28	30.97	91.3	0.36	24.84	1.99	0.99
26.0	0.15	31.00	91.3	0.36	24.87	1.86	1.05
28.0	-0.03	31.05	91.3	0.36	24.92	1.69	1.11
30.0	-0.14	31.03	89.9	0.43	24.91	1.58	1.17
35.0	-0.46	31.16	90.6	0.40	25.03	1.27	1.32
40.0	-0.65	31.23	90.6	0.40	25.09	1.09	1.47
45.0	-0.74	31.30	91.2	0.37	25.14	1.01	1.61
50.0	-1.05	31.28	91.1	0.37	25.14	0.70	1.75
55.0	-1.12	31.43	90.7	0.39	25.27	0.64	1.89
60.0	-1.11	31.62	91.2	0.37	25.41	0.66	2.03
65.0	-1.24	31.67	91.3	0.37	25.46	0.54	2.15
70.0	-1.34	31.75	91.0	0.38	25.53	0.45	2.28
75.0	-1.39	31.79	90.2	0.41	25.56	0.40	2.40
80.0	-1.58	31.84	55.2	2.37	25.61	0.23	2.52
85.0	-1.43	31.96	91.1	0.37	25.70	0.38	2.64
90.0	-1.36	32.11	91.6	0.35	25.82	0.47	2.75
95.0	-1.35	32.21	91.6	0.35	25.90	0.48	2.86
100.0	-1.36	32.32	91.4	0.36	26.00	0.49	2.96
110.0	-1.40	32.51	91.7	0.35	26.15	0.46	3.15
120.0	-1.39	32.65	91.7	0.35	26.26	0.49	3.33
130.0	-1.40	32.75	91.6	0.35	26.34	0.49	3.51
140.0	-1.42	32.86	91.6	0.35	26.43	0.48	3.67
150.0	-1.43	32.97	91.6	0.35	26.52	0.49	3.82
175.0	-1.31	33.32	91.3	0.36	26.80	0.65	4.17
200.0	-0.84	33.88	90.6	0.39	27.24	1.16	4.42
211.0	-0.62	34.10	89.7	0.43	27.41	1.40	4.51



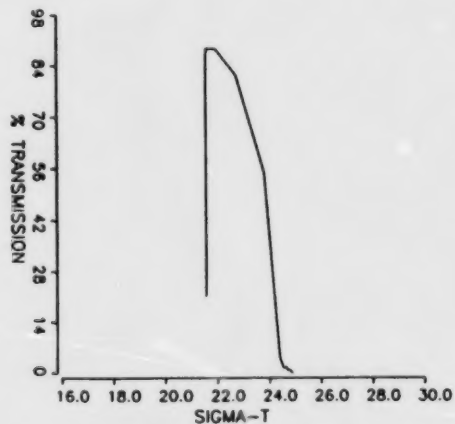
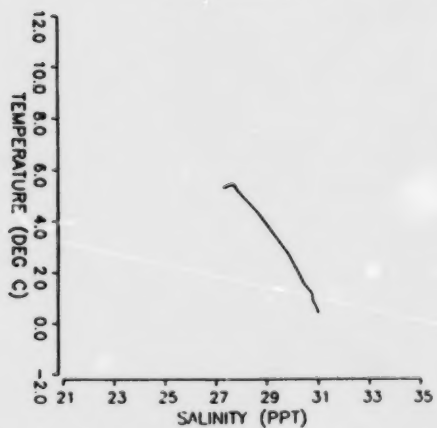
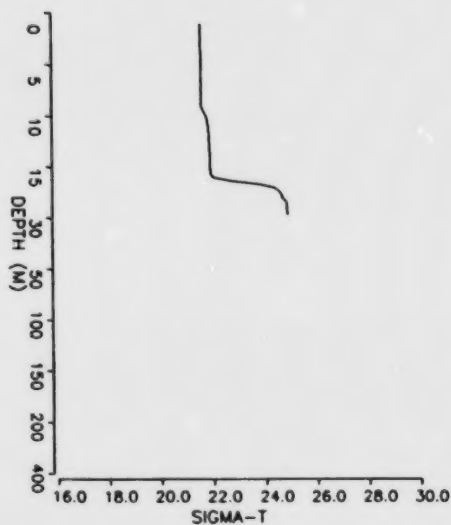
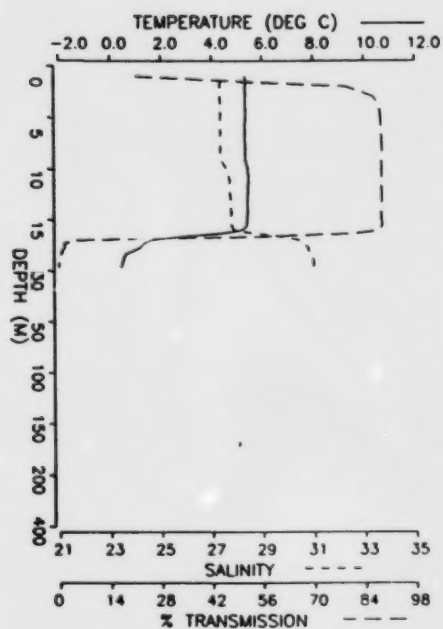
STATION LAT LONG DATE
 48-5 (SS-2) 71 27.9 N 128 43.9 W 10:36 PDT ON 23/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.05	28.96	3.4	13.48	22.66	8.63	0.05
2.0	6.96	29.19	50.4	2.74	22.85	8.55	0.10
3.0	6.95	29.23	88.0	0.51	22.89	8.55	0.15
4.0	6.95	29.43	88.4	0.49	23.04	8.56	0.20
5.0	6.94	29.55	89.6	0.44	23.13	8.56	0.25
6.0	6.94	29.63	89.9	0.43	23.20	8.57	0.30
7.0	6.95	29.65	89.9	0.43	23.22	8.57	0.35
8.0	6.95	29.68	89.9	0.42	23.24	8.57	0.39
9.0	6.95	29.69	89.9	0.43	23.25	8.57	0.44
10.0	6.94	29.72	89.9	0.42	23.27	8.57	0.49
12.0	6.93	29.73	89.9	0.42	23.28	8.56	0.58
14.0	6.89	29.73	89.9	0.42	23.28	8.52	0.67
16.0	6.42	29.56	90.0	0.42	23.21	8.05	0.76
18.0	3.53	30.48	90.5	0.40	24.23	5.21	0.85
20.0	2.20	30.64	90.8	0.39	24.47	3.89	0.92
22.0	1.49	30.85	90.9	0.38	24.68	3.20	0.99
24.0	1.06	31.04	90.9	0.38	24.86	2.78	1.05
26.0	0.98	31.19	90.9	0.38	25.00	2.39	1.11
28.0	0.41	31.30	90.9	0.38	25.10	2.14	1.17
30.0	0.17	31.36	90.6	0.40	25.16	1.90	1.23
35.0	-0.16	31.60	91.0	0.38	25.37	1.60	1.36
40.0	-0.52	31.75	90.3	0.41	25.50	1.25	1.49
45.0	-0.59	32.05	81.5	0.82	25.75	1.20	1.61
50.0	-1.01	32.13	87.5	0.53	25.83	0.79	1.72
55.0	-1.04	32.20	89.2	0.46	25.89	0.76	1.83
60.0	-1.30	32.27	90.9	0.38	25.95	0.51	1.93
65.0	-1.15	32.33	90.1	0.42	25.99	0.67	2.03
70.0	-1.29	32.40	90.5	0.40	26.06	0.54	2.13
75.0	-1.34	32.47	91.4	0.36	26.11	0.49	2.23
80.0	-1.40	32.50	90.9	0.38	26.14	0.44	2.32
85.0	-1.37	32.53	91.3	0.37	26.16	0.48	2.42
90.0	-1.37	32.59	90.8	0.39	26.21	0.49	2.51
95.0	-1.39	32.66	90.5	0.40	26.27	0.47	2.60
100.0	-1.45	32.69	91.5	0.36	26.30	0.42	2.69
110.0	-1.47	32.76	91.6	0.35	26.35	0.41	2.86
120.0	-1.43	32.85	91.4	0.36	26.43	0.46	3.02
130.0	-1.42	32.99	91.1	0.37	26.53	0.48	3.17
140.0	-1.41	33.02	88.6	0.48	26.56	0.50	3.32
150.0	-1.40	33.12	90.0	0.42	26.64	0.53	3.47
156.0	-1.38	33.14	89.0	0.47	26.66	0.55	3.55



STATION LAT LONG DATE
 B01-5 70 5.4 N 133 55.0 W 06:45 PDT ON 01/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.33	27.33	21.0	6.24	21.57	6.81	0.06
2.0	5.33	27.33	79.2	0.93	21.57	6.82	0.13
3.0	5.32	27.33	86.7	0.57	21.57	6.81	0.19
4.0	5.33	27.34	88.4	0.49	21.58	6.82	0.25
5.0	5.33	27.34	88.5	0.49	21.58	6.82	0.31
6.0	5.32	27.34	88.7	0.48	21.57	6.82	0.38
7.0	5.32	27.34	88.8	0.47	21.58	6.82	0.44
8.0	5.32	27.34	88.9	0.47	21.58	6.82	0.50
9.0	5.33	27.36	88.9	0.47	21.59	6.82	0.57
10.0	5.42	27.59	88.8	0.47	21.77	6.93	0.63
12.0	5.43	27.72	88.7	0.48	21.87	6.95	0.75
14.0	5.41	27.75	88.6	0.48	21.90	6.93	0.87
16.0	5.37	27.78	88.9	0.47	21.92	6.89	0.99
18.0	5.19	27.90	87.9	0.52	22.03	6.72	1.11
20.0	2.78	29.84	54.9	2.40	23.79	4.40	1.21
22.0	1.31	30.65	1.4	17.16	24.53	3.00	1.28
24.0	0.94	30.79	0.9	19.02	24.66	2.64	1.35
26.0	0.53	30.98	0.2	25.78	24.84	2.24	1.41
28.0	0.46	30.99	0.0	33.73	24.85	2.18	1.47
29.0	0.42	31.01	0.0	33.71	24.87	2.14	1.50



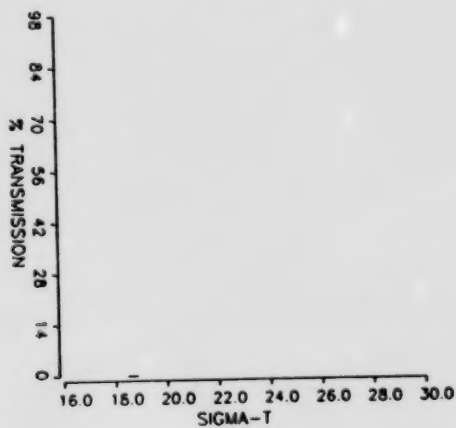
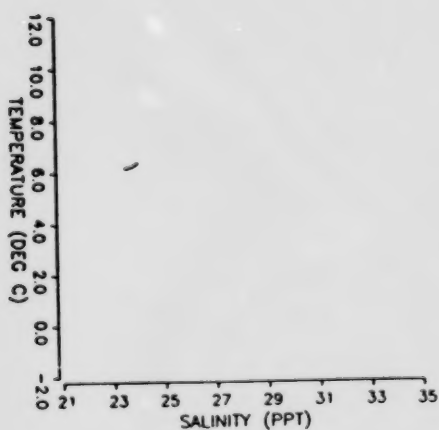
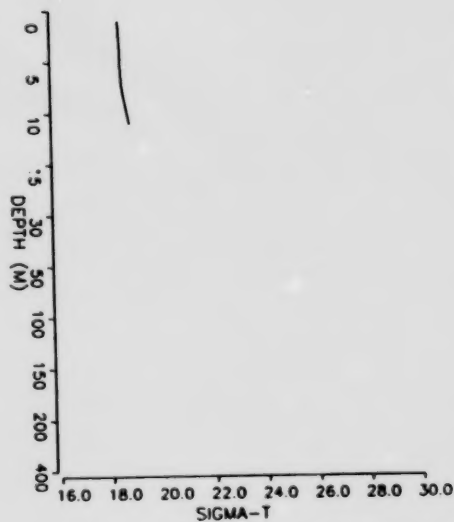
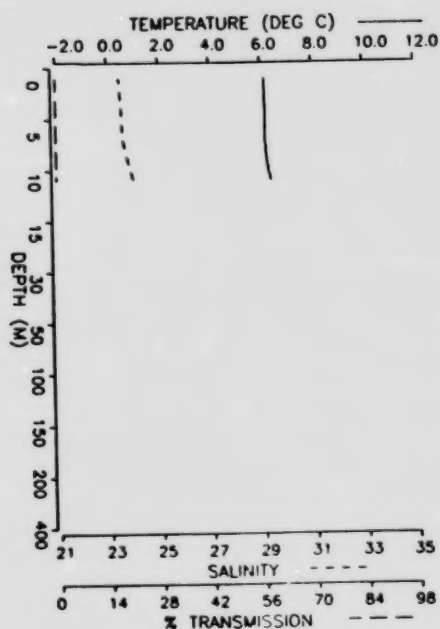
STATION B01-5 CAST # 87056
WATER DEPTH 28.0 M
LAT : 70 5.40 N LONG : 133 55.00 W

DATE : 06:45

ON 01/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION		LAT		LONG		DATE
BO2-5	69	50.0 N	133	18.2 W	08:01 PDT ON	09/06/ 87

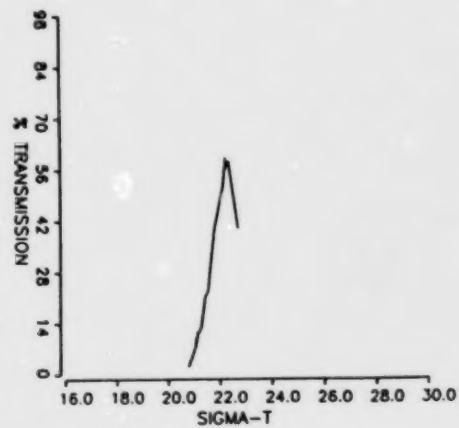
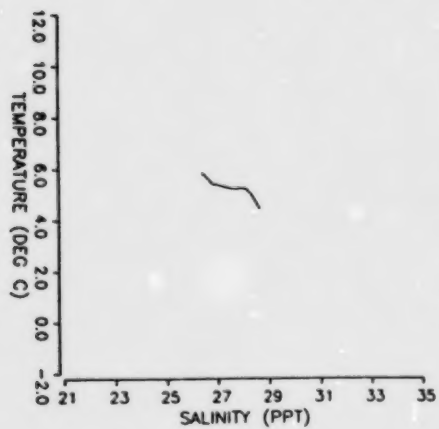
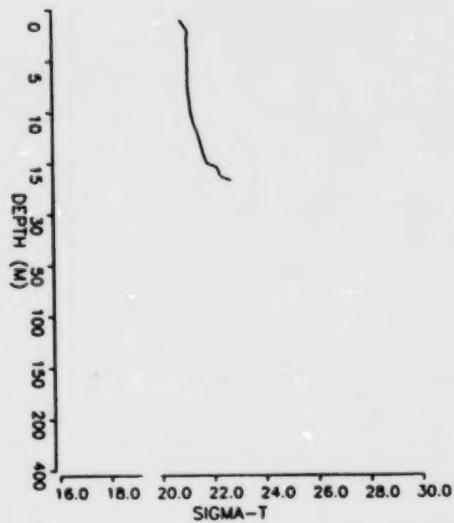
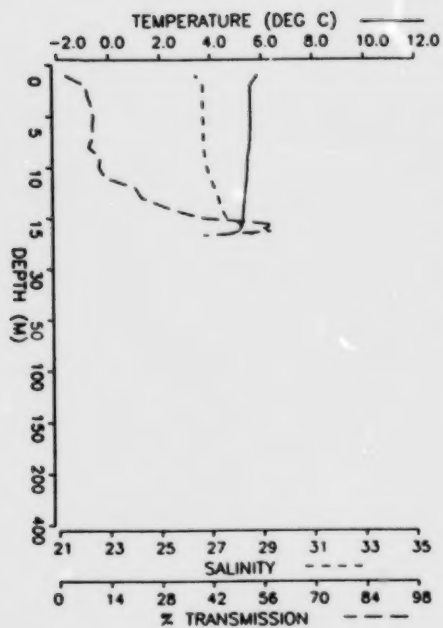
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.18	23.48	0.0	36.84	18.45	7.45	0.09
2.0	6.18	23.51	0.0	36.84	18.47	7.46	0.19
3.0	6.18	23.53	0.0	36.84	18.49	7.46	0.28
4.0	6.19	23.56	0.0	36.84	18.51	7.47	0.37
5.0	6.19	23.58	0.0	36.84	18.52	7.47	0.46
6.0	6.19	23.60	0.0	36.84	18.54	7.47	0.56
7.0	6.19	23.62	0.0	36.84	18.55	7.48	0.65
8.0	6.20	23.70	0.0	36.84	18.62	7.49	0.74
9.0	6.25	23.80	0.0	45.61	18.69	7.55	0.83
10.0	6.30	23.89	0.0	36.84	18.75	7.61	0.92
11.0	6.39	24.02	0.0	36.84	18.85	7.71	1.01



STATION B02-5 CAST # 87051 DATE : 08:01 ON 09/06/ 87
 WATER DEPTH 15.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 50.00 N LONG : 133 18.20 W

STATION	LAT		LONG		DATE		
B03-5	69	47.2 N	133	21.0 W	22:16 PDT	ON	09/06/ 87

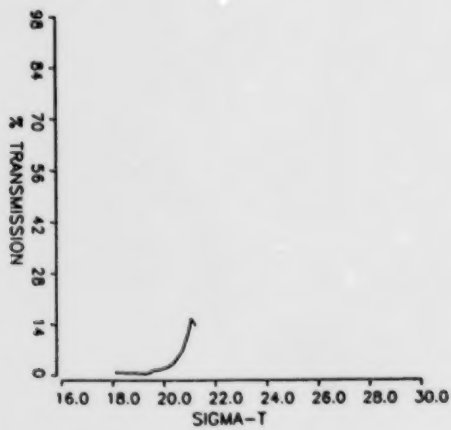
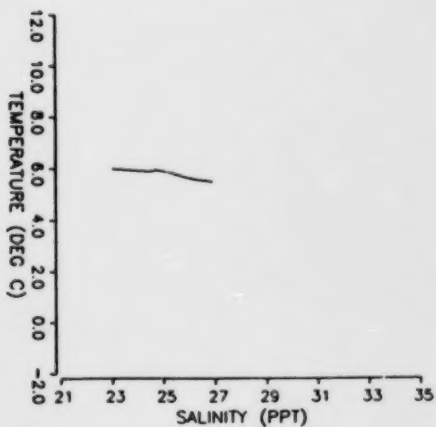
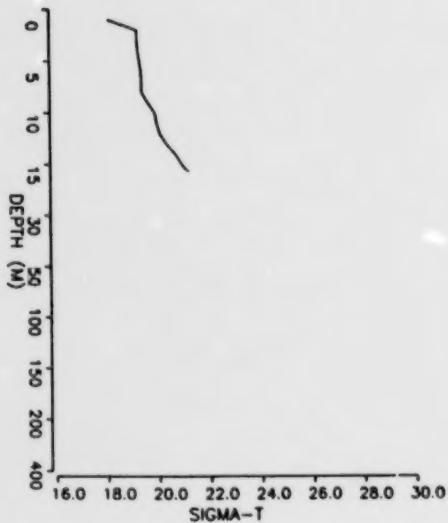
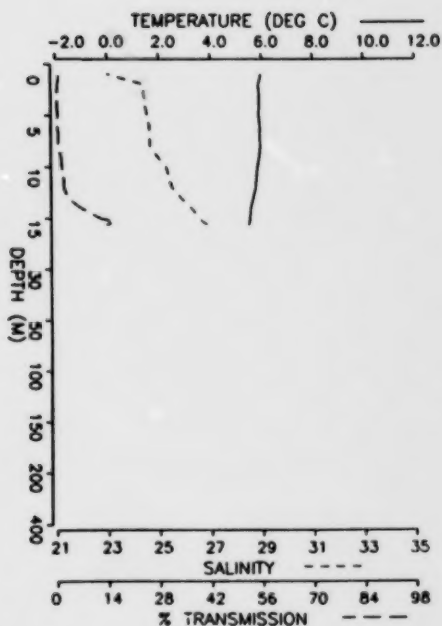
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.86	26.41	2.1	15.48	20.79	7.30	0.07
2.0	5.56	26.72	7.8	10.20	21.06	7.01	0.14
3.0	5.56	26.71	8.2	9.98	21.06	7.02	0.21
4.0	5.56	26.72	9.4	9.48	21.06	7.02	0.28
5.0	5.56	26.72	9.9	9.25	21.07	7.02	0.34
6.0	5.55	26.73	9.6	9.37	21.07	7.01	0.41
7.0	5.55	26.73	9.7	9.32	21.07	7.01	0.48
8.0	5.52	26.74	8.5	9.84	21.08	6.98	0.55
9.0	5.45	26.80	11.7	8.58	21.13	6.91	0.61
10.0	5.43	26.86	11.4	8.69	21.19	6.90	0.68
12.0	5.36	27.15	21.3	6.19	21.43	6.84	0.81
14.0	5.26	27.42	29.9	4.82	21.65	6.78	0.94
16.0	5.26	28.04	51.5	2.65	22.13	6.80	1.06
18.0	5.16	28.17	56.4	2.29	22.25	6.71	1.17
20.0	4.44	28.65	40.0	3.67	22.70	6.02	1.28



STATION B03-5 CAST # 87052 DATE : 22:16 ON 09/06/ 87
 WATER DEPTH 10.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 47.20 N LONG : 133 21.00 W

STATION BO4-5 LAT 69 57.4 N LONG 133 11.8 W DATE 00:09 PDT ON 10/06/ 87

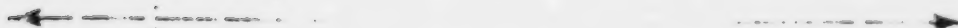
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.99	23.02	0.8	19.31	18.10	7.24	0.10
2.0	5.88	24.42	0.5	20.94	19.22	7.21	0.19
3.0	5.90	24.44	0.4	22.39	19.23	7.23	0.27
4.0	5.90	24.47	0.4	21.92	19.26	7.24	0.36
5.0	5.89	24.54	0.5	21.38	19.31	7.23	0.44
6.0	5.92	24.63	0.5	21.09	19.38	7.26	0.53
7.0	5.93	24.65	0.7	20.07	19.39	7.27	0.61
8.0	5.94	24.66	0.7	19.82	19.40	7.28	0.70
9.0	5.90	24.95	1.5	16.89	19.63	7.26	0.78
10.0	5.83	25.29	1.7	16.38	19.91	7.21	0.86
12.0	5.76	25.52	2.1	15.49	20.09	7.15	1.02
14.0	5.56	26.26	6.8	10.75	20.70	7.00	1.16
16.0	5.51	26.69	15.8	7.39	21.04	6.97	1.30
17.0	5.48	26.91	13.8	7.93	21.22	6.96	1.37

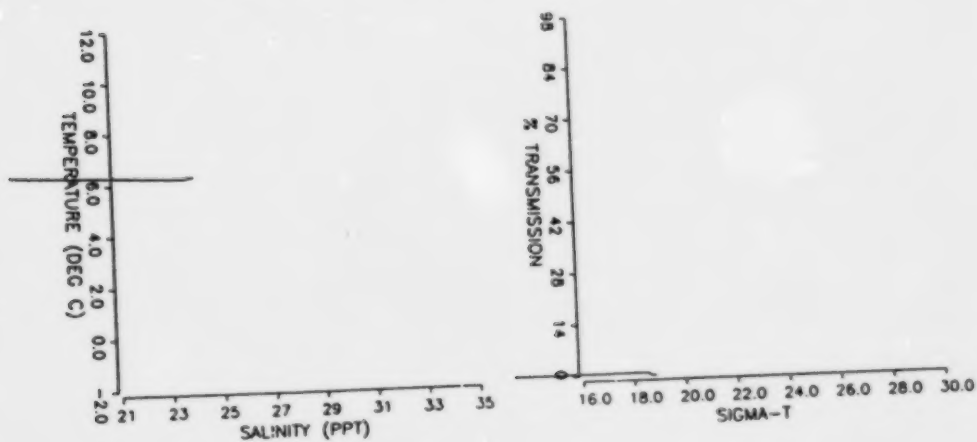
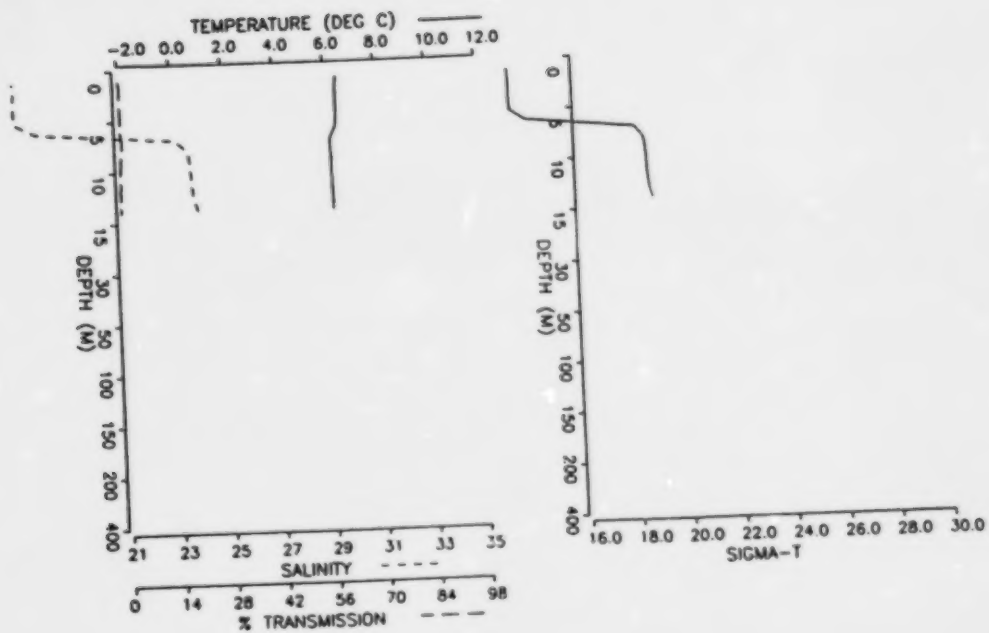


STATION B04-5 CAST # 87053 DATE : 00:09 ON 10/06/ 87
 WATER DEPTH 19.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 57.40 N LONG : 133 11.80 W

STATION	LAT		LONG		DATE		
BO5-5	69	52.4 N	133	14.3 W	06:42 PDT	ON	10/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.52	16.97	0.3	23.09	13.30	7.43	0.14
2.0	6.46	16.99	0.4	22.45	13.32	7.38	0.29
3.0	6.46	16.99	0.4	22.22	13.32	7.38	0.43
4.0	6.46	16.98	0.4	22.22	13.31	7.38	0.57
5.0	6.46	17.02	0.4	22.11	13.34	7.38	0.72
6.0	6.43	17.81	0.4	21.83	13.97	7.39	0.86
7.0	6.21	23.18	0.7	19.69	18.21	7.47	0.97
8.0	6.22	23.60	0.7	20.12	18.54	7.50	1.07
9.0	6.23	23.69	0.3	23.95	18.61	7.52	1.16
10.0	6.23	23.73	0.2	25.50	18.64	7.53	1.25
12.0	6.25	23.77	0.0	31.89	18.67	7.55	1.43
14.0	6.27	23.99	0.0	36.84	18.84	7.59	1.61

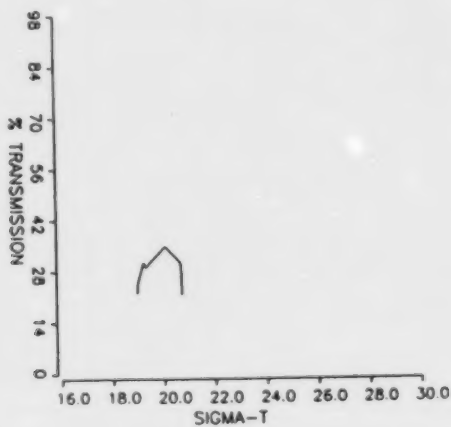
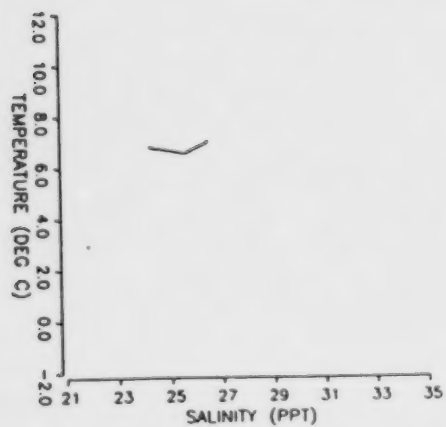
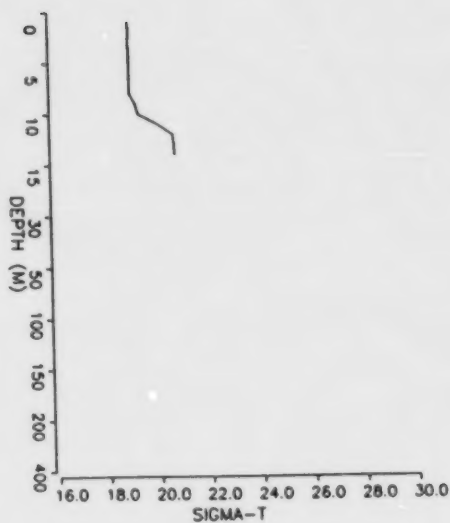
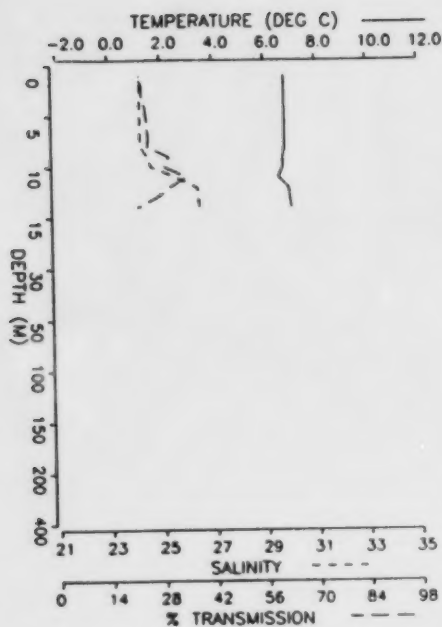




STATION B05-5 CAST # 87054 DATE : 06:42 ON 10/06/ 87
 WATER DEPTH 15.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 52.40 N LONG : 133 14.30 W

STATION	LAT	LONG	DATE
BO6-5	70 28.0 N	129 47.0 W	07:45 PDT ON 11/06/ 87

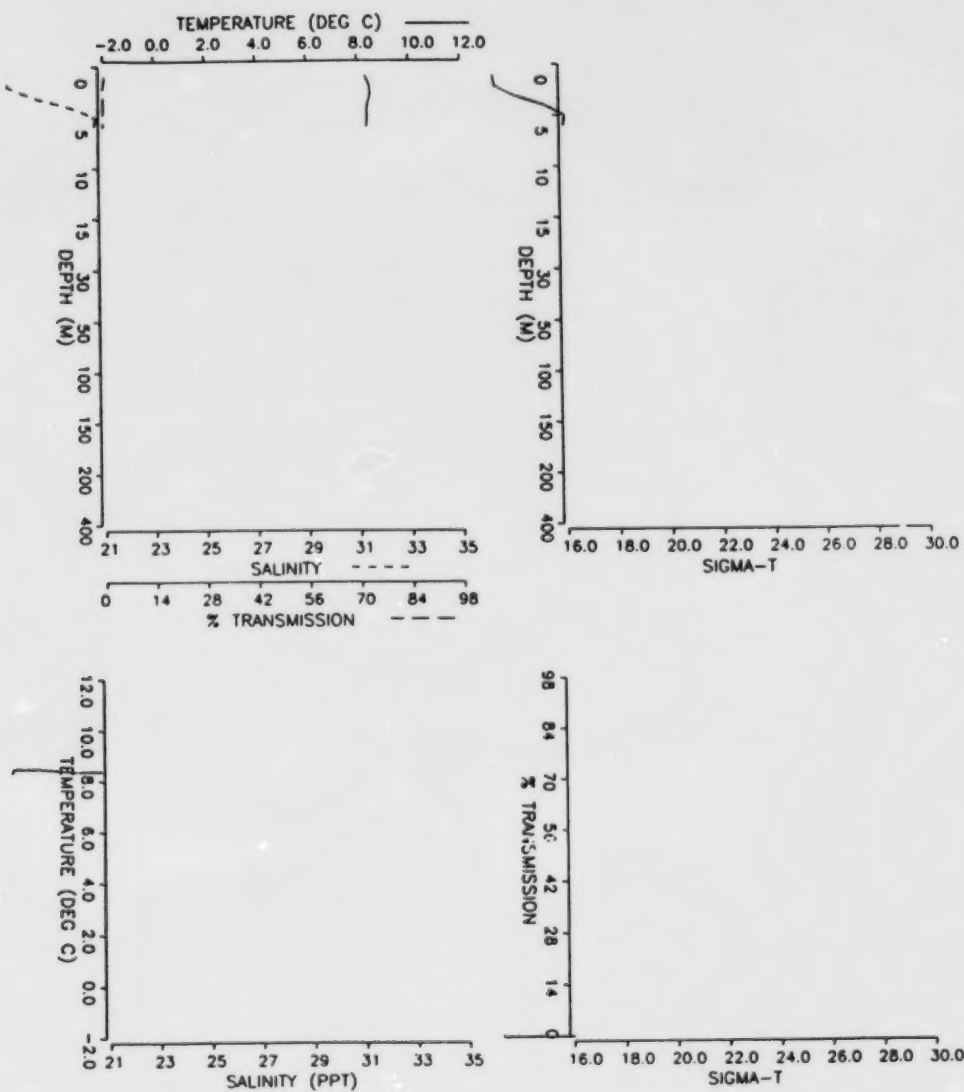
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.80	24.21	22.0	6.06	18.95	8.12	0.09
2.0	6.80	24.22	23.1	5.86	18.97	8.12	0.18
3.0	6.80	24.22	23.1	5.87	18.96	8.12	0.26
4.0	6.80	24.22	23.8	5.74	18.97	8.12	0.35
5.0	6.80	24.22	24.1	5.70	18.97	8.12	0.44
6.0	6.80	24.22	24.5	5.62	18.97	8.12	0.53
7.0	6.80	24.23	24.6	5.60	18.97	8.12	0.62
8.0	6.80	24.24	24.5	5.63	18.98	8.12	0.71
9.0	6.73	24.52	30.3	4.78	19.20	8.07	0.79
10.0	6.72	24.64	29.1	4.94	19.30	8.07	0.88
12.0	6.94	26.39	30.4	4.76	20.65	8.39	1.03
14.0	7.05	26.48	21.5	6.14	20.71	8.50	1.18



STATION B06-5 CAST # 87055 DATE : 07:45 ON 11/06/ 87
 WATER DEPTH 16.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 28.00 N LONG : 129 47.00 W

STATION LAT LONG DATE
K1-5 69 42.2 N 133 9.0 W 09:21 PDT ON 29/08/ 87

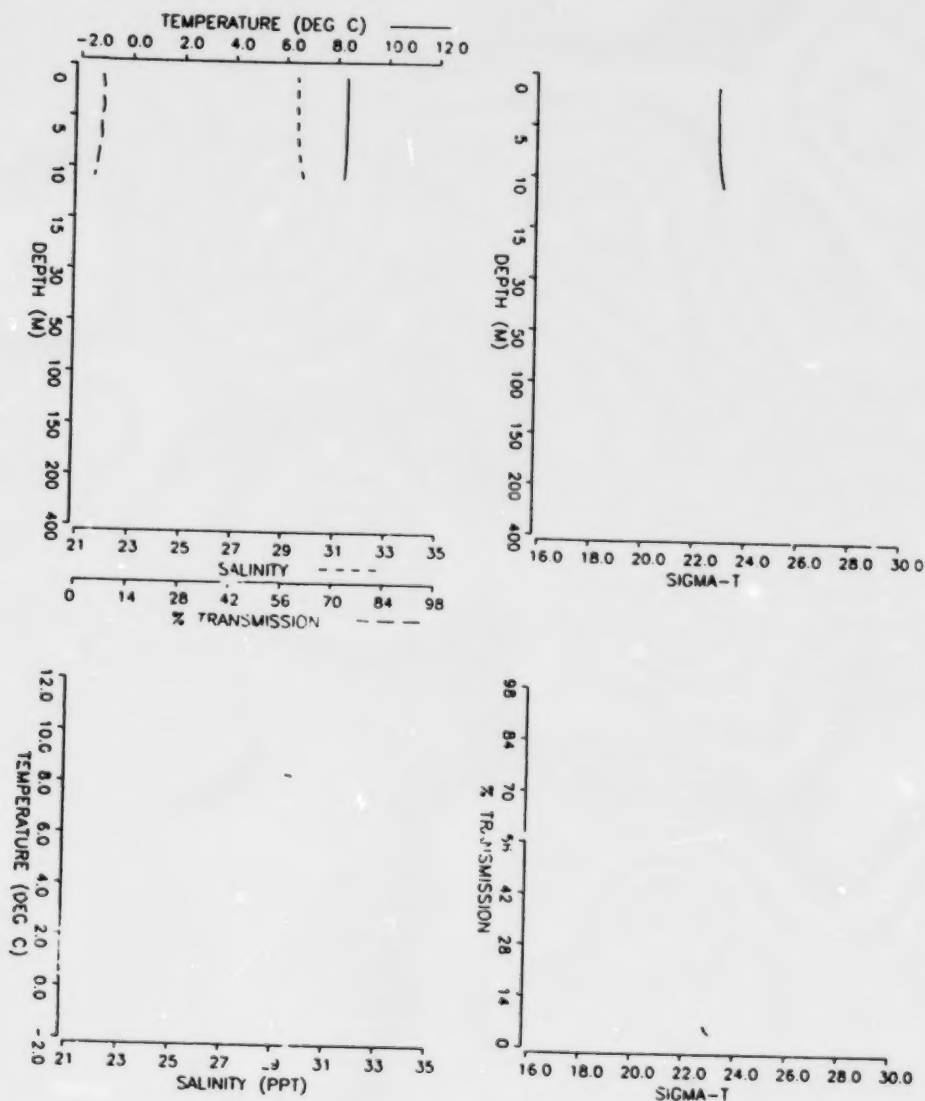
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.33	17.19	0.4	22.59	13.29	9.26	0.14
2.0	8.50	17.26	0.0	40.03	13.32	9.44	0.29
3.0	8.49	18.23	0.0	36.84	14.08	9.48	0.43
4.0	8.38	19.73	0.0	36.84	15.27	9.45	0.56
5.0	8.38	20.71	0.0	36.84	16.03	9.51	0.68
6.0	8.37	20.65	0.0	36.84	15.98	9.49	0.79



STATION K1-5 CAST # 87057 DATE : 09:21 ON 29/08/ 87
 WATER DEPTH 7.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 42.20 N LONG : 133 9.00 W

STATION	LAT		LONG		DATE		
MB1-5	70	5.9 N	131	9.5 W	21:01 PDT ON	21/08/	87

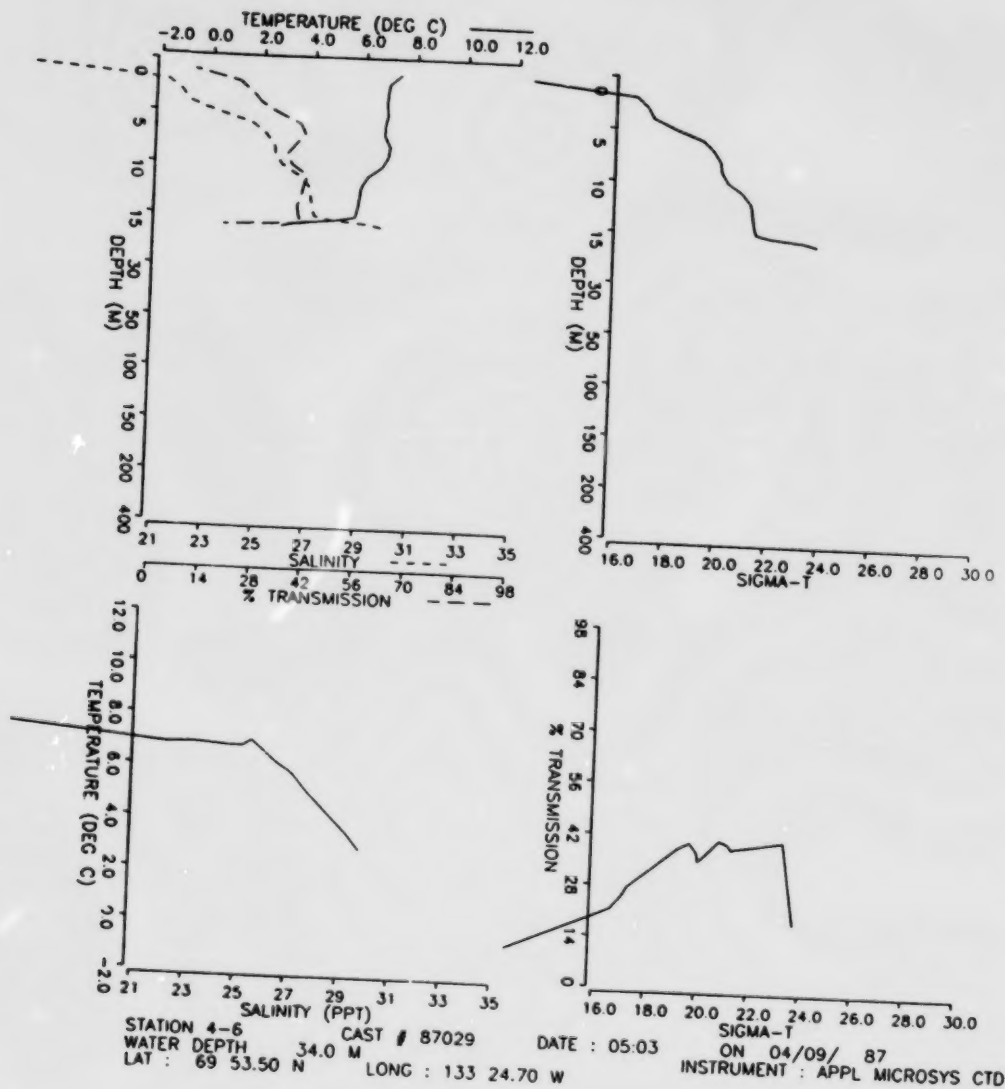
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.36	29.45	5.8	11.36	22.87	9.96	0.05
2.0	8.36	29.44	6.3	11.04	22.86	9.97	0.10
3.0	8.36	29.44	5.9	11.32	22.86	9.97	0.15
4.0	8.36	29.45	6.2	11.10	22.87	9.97	0.20
5.0	8.35	29.45	5.7	11.43	22.87	9.97	0.25
6.0	8.35	29.47	5.6	11.53	22.88	9.96	0.30
7.0	8.35	29.47	5.7	11.45	22.89	9.96	0.35
8.0	8.33	29.51	5.2	11.63	22.92	9.95	0.40
9.0	8.32	29.55	4.8	12.12	22.95	9.94	0.45
10.0	8.30	29.61	4.4	12.51	23.00	9.92	0.50
11.0	8.27	29.70	3.8	13.04	23.08	9.90	0.55



STATION MB1-5 CAST # 87058 DATE : 21:01 ON 21/08/ 87
 WATER DEPTH 13.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 5.90 N LONG : 131 9.50 W

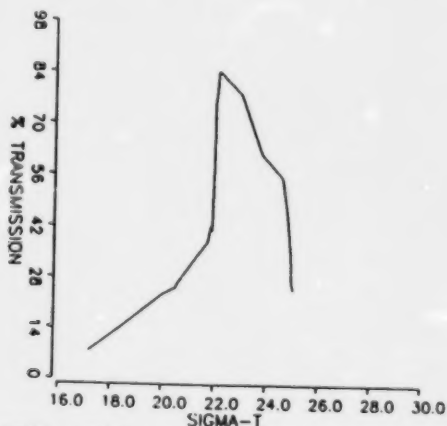
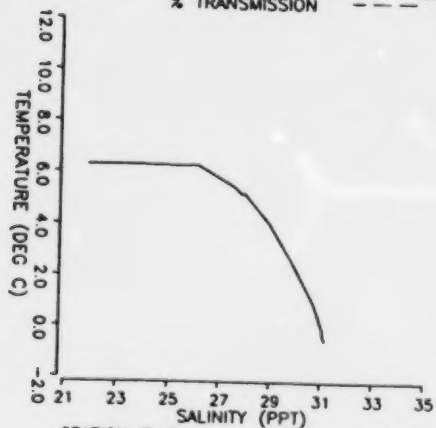
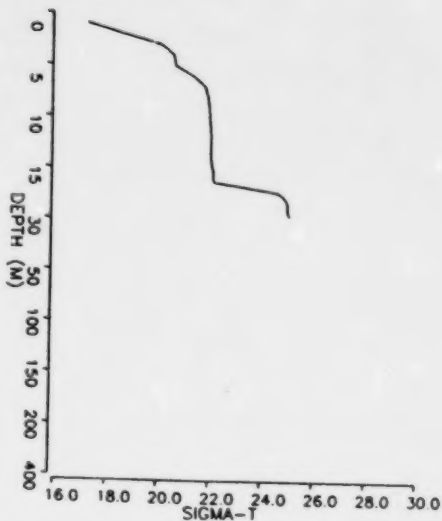
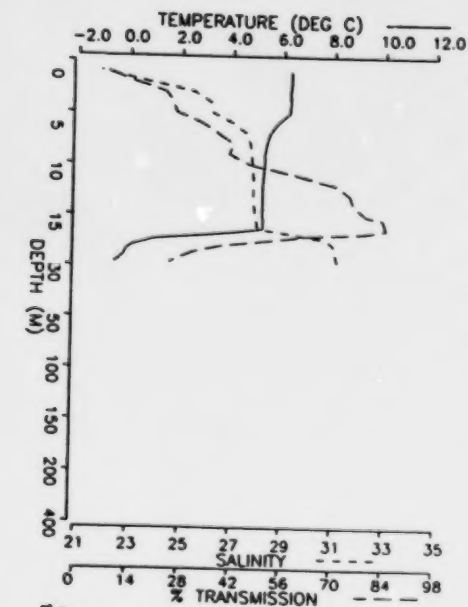
STATION	LAT	LONG	DATE
4-6	69 53.5 N	133 24.7 W	05:03 PDT ON 04/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.39	16.13	9.0	9.62	12.56	8.26	0.15
2.0	6.91	21.23	21.3	6.18	16.60	8.06	0.28
3.0	6.85	21.79	24.8	5.57	17.05	8.04	0.39
4.0	6.83	22.08	27.4	5.17	17.28	8.03	0.50
5.0	6.88	23.19	32.3	4.52	18.15	8.14	0.60
6.0	6.79	24.57	38.4	3.83	19.24	8.12	0.69
7.0	6.79	25.11	39.7	3.70	19.66	8.16	0.77
8.0	6.99	25.46	37.2	3.95	19.92	8.38	0.85
9.0	6.93	25.53	34.8	4.22	19.98	8.33	0.93
10.0	6.70	25.81	36.5	4.04	20.22	8.11	1.01
12.0	5.91	26.84	39.6	3.71	21.12	7.38	1.15
14.0	5.79	27.00	38.0	3.87	21.26	7.27	1.28
16.0	4.97	27.73	38.9	3.78	21.92	6.49	1.41
18.0	2.84	29.77	18.1	6.85	23.72	4.47	1.51



STATION 5-6 LAT 70 1.0 N LONG 133 26.0 W DATE 17:13 PDT ON 03/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.28	21.88	7.6	10.29	17.18	7.47	0.11
2.0	6.28	23.60	15.0	7.59	18.53	7.56	0.20
3.0	6.25	25.48	23.5	5.80	20.01	7.64	0.29
4.0	6.26	26.12	25.4	5.48	20.52	7.68	0.37
5.0	6.22	26.18	26.4	5.33	20.57	7.65	0.44
6.0	5.74	27.01	33.5	4.37	21.28	7.22	0.51
7.0	5.45	27.55	37.8	3.89	21.73	6.96	0.57
8.0	5.33	27.69	42.1	3.46	21.85	6.84	0.63
9.0	5.26	27.74	40.9	3.57	21.90	6.78	0.69
10.0	5.25	27.77	46.7	3.05	21.92	6.77	0.75
12.0	5.19	27.83	70.8	1.38	21.97	6.71	0.87
14.0	5.18	27.83	75.3	1.14	21.98	6.70	0.99
16.0	5.20	27.94	83.3	0.73	22.07	6.73	1.10
18.0	5.20	27.96	83.9	0.70	22.08	6.73	1.22
20.0	4.04	28.95	78.1	0.99	22.98	5.63	1.33
22.0	0.96	30.69	55.5	2.36	24.58	2.66	1.41
24.0	0.10	30.99	39.5	3.72	24.87	1.81	1.48
26.0	-0.18	31.08	30.8	4.72	24.95	1.54	1.54
28.0	-0.40	31.11	26.6	5.30	24.98	1.32	1.60
29.0	-0.57	31.16	24.9	5.57	25.03	1.15	1.63



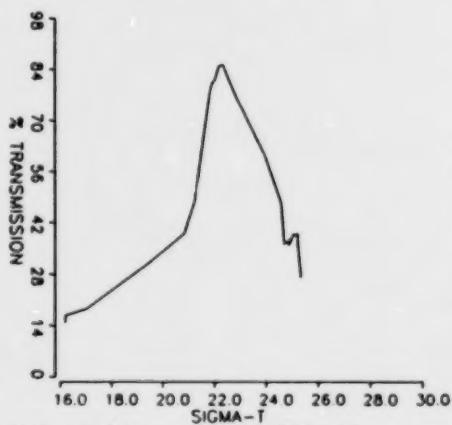
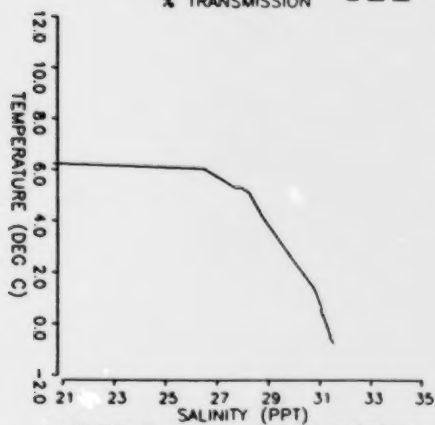
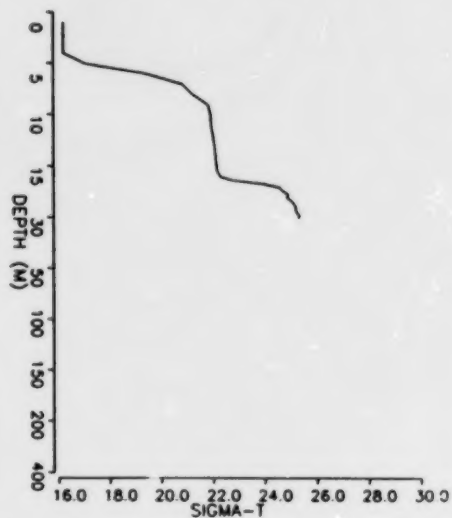
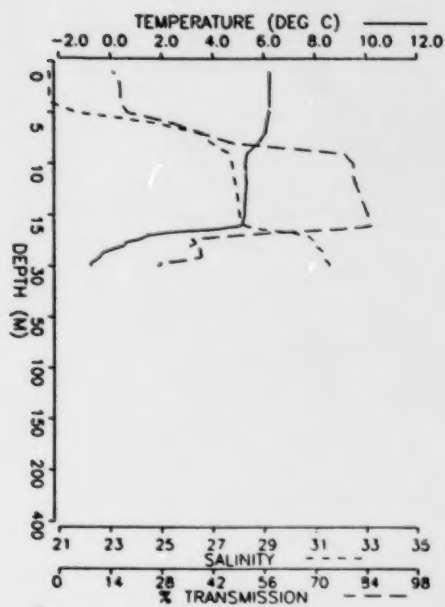
STATION 5-6 CAST # 87036
WATER DEPTH 29.0 M
LAT : 70 1.00 N LONG : 133 26.00 W

DATE : 17:13

ON 03/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION 5-6A LAT 70 3.4 N 133 LONG 22.5 W DATE 16:54 PDT ON 03/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.23	20.63	14.8	7.64	16.20	7.35	0.12
2.0	6.23	20.63	16.6	7.19	16.20	7.35	0.23
3.0	6.23	20.63	16.8	7.13	16.20	7.35	0.35
4.0	6.23	20.65	16.8	7.12	16.21	7.35	0.46
5.0	6.20	21.69	18.6	6.72	17.04	7.38	0.57
6.0	6.11	24.71	30.8	4.71	19.42	7.46	0.67
7.0	6.05	26.49	39.0	3.77	20.83	7.50	0.74
8.0	5.78	26.97	47.6	2.97	21.24	7.25	0.81
9.0	5.33	27.65	78.0	0.99	21.82	6.85	0.87
10.0	5.27	27.77	80.5	0.87	21.92	6.79	0.93
12.0	5.31	27.89	81.2	0.83	22.02	6.83	1.05
14.0	5.26	28.01	83.4	0.72	22.11	6.79	1.17
16.0	5.21	28.08	84.9	0.65	22.17	6.75	1.28
18.0	5.10	28.25	85.3	0.63	22.32	6.65	1.40
20.0	2.38	30.02	60.5	2.01	23.96	4.03	1.50
22.0	1.20	30.86	36.1	4.08	24.71	2.90	1.57
24.0	0.53	31.04	35.8	4.11	24.88	2.25	1.63
26.0	-0.29	31.34	38.5	3.82	25.16	1.44	1.69
28.0	-0.51	31.39	36.3	4.05	25.21	1.23	1.74
30.0	-0.75	31.54	27.1	5.23	25.34	0.99	1.80



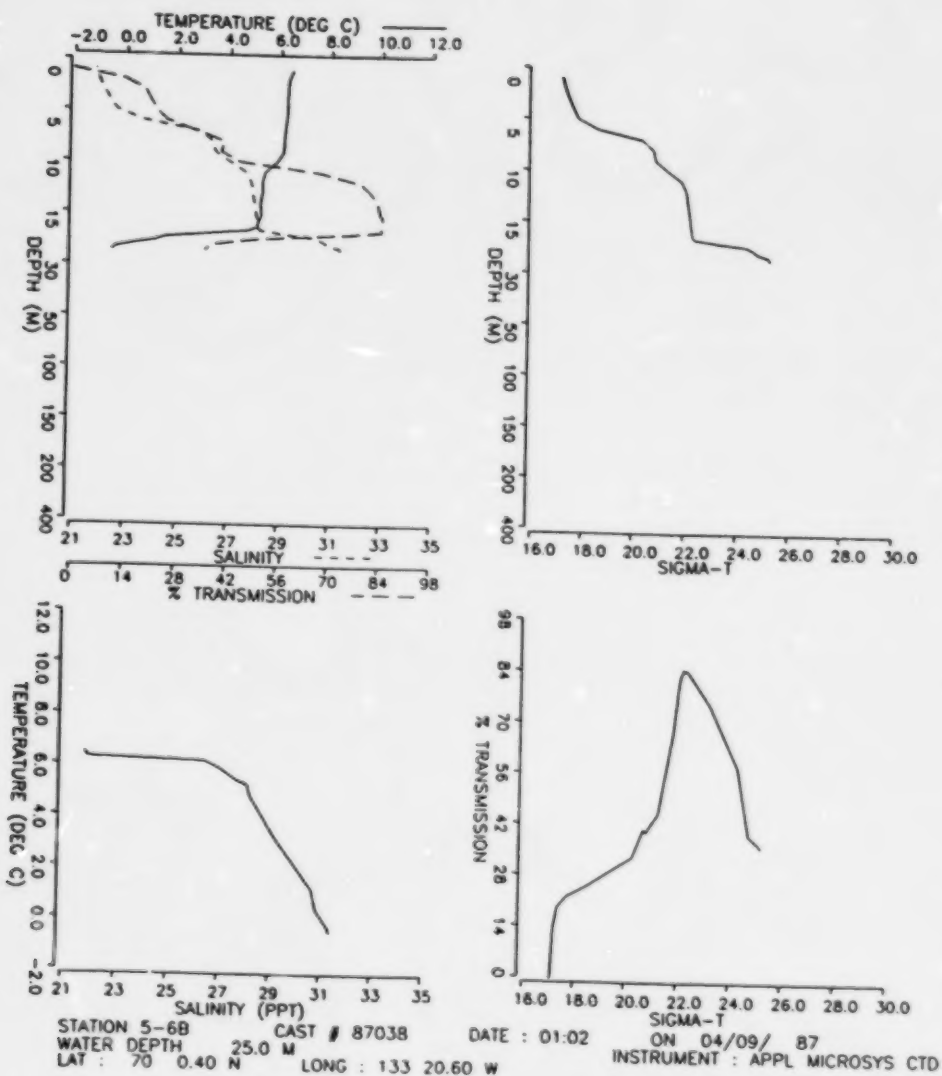
STATION 5-6A CAST # 87037
WATER DEPTH 29.0 M
LAT 70 3.40 N LONG 133 22.50 W

DATE 16:54

ON 03/09/ 87
INSTRUMENT : APPL MICROSYS CTD

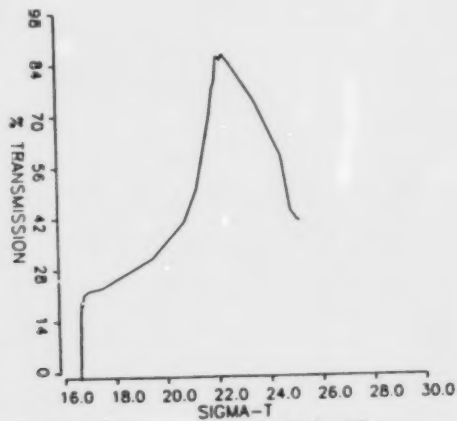
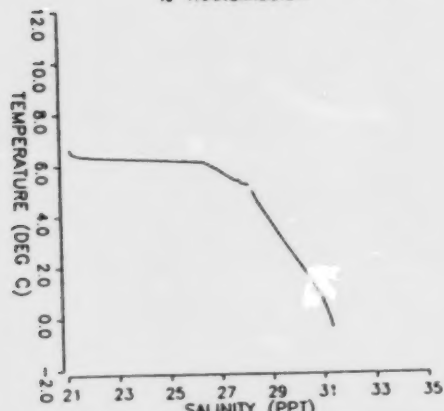
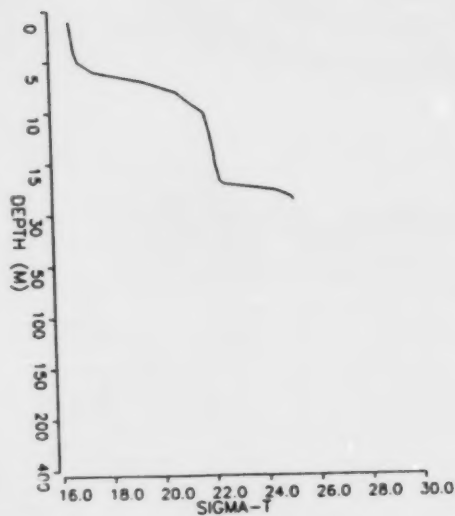
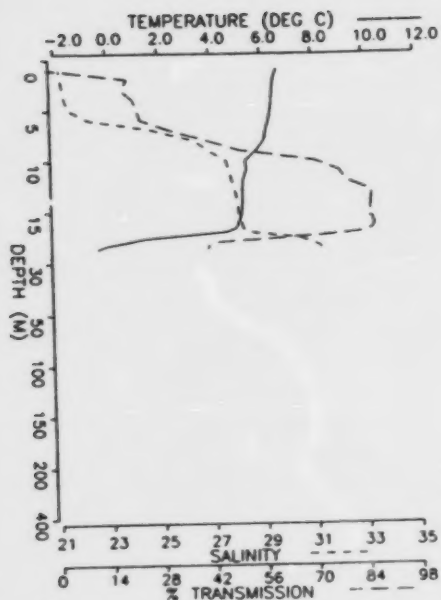
STATION LAT LONG DATE
 5-6B 70 0.4 N 133 20.6 W 01:02 PDT ON 04/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.46	21.80	-0.5	36.84	17.10	7.64	0.11
2.0	6.29	21.91	13.3	8.06	17.20	7.48	0.21
3.0	6.27	22.10	18.9	6.87	17.35	7.47	0.32
4.0	6.25	22.31	20.3	6.38	17.52	7.47	0.42
5.0	6.25	22.59	21.9	6.07	17.74	7.48	0.52
6.0	6.21	23.57	24.8	5.58	18.52	7.49	0.62
7.0	6.16	25.78	32.7	4.48	20.26	7.56	0.70
8.0	6.13	26.33	40.5	3.62	20.70	7.56	0.77
9.0	6.12	26.43	39.6	3.71	20.77	7.56	0.85
10.0	5.85	27.01	44.9	3.21	21.26	7.33	0.91
12.0	5.30	27.86	78.2	0.98	21.99	6.83	1.04
14.0	5.23	27.98	83.0	0.75	22.09	6.76	1.15
16.0	5.21	28.06	84.2	0.69	22.16	6.75	1.27
18.0	5.13	28.11	83.9	0.70	22.20	6.67	1.38
20.0	4.75	28.21	84.2	0.69	22.32	6.31	1.49
22.0	1.52	30.39	57.5	2.22	24.31	3.20	1.59
24.0	0.37	30.85	38.9	3.78	24.74	2.07	1.66
26.0	-0.55	31.40	35.5	4.15	25.22	1.19	1.71



STATION	LAT	LONG	DATE
5-6C	70 0.4 N	133 20.6 W	02:22 PDT ON 04/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.65	21.20	-1.8	36.84	16.60	7.80	0.11
2.0	6.50	21.26	19.7	6.50	16.67	7.66	0.22
3.0	6.47	21.33	18.2	6.81	16.73	7.62	0.33
4.0	6.42	21.40	21.2	6.20	16.78	7.58	0.44
5.0	6.37	21.57	22.2	6.02	16.93	7.55	0.55
6.0	6.30	22.29	23.0	5.87	17.50	7.51	0.66
7.0	6.18	24.78	31.1	4.87	19.47	7.53	0.75
8.0	6.12	26.37	40.9	3.58	20.73	7.56	0.83
9.0	5.81	26.94	50.1	2.77	21.21	7.28	0.89
10.0	5.38	27.60	70.5	1.40	21.78	6.89	0.96
12.0	5.26	27.83	79.4	0.92	21.97	6.79	1.08
14.0	5.23	28.04	85.9	0.61	22.14	6.77	1.19
16.0	5.17	28.11	85.0	0.65	22.20	6.72	1.31
18.0	5.09	28.20	86.6	0.58	22.28	6.64	1.42
20.0	4.97	28.26	86.1	0.60	22.34	6.53	1.53
22.0	2.97	29.48	74.0	1.21	23.48	4.59	1.64
24.0	0.73	30.97	44.0	3.28	24.82	2.44	1.71
26.0	-0.43	31.36	41.0	3.56	25.18	1.31	1.77

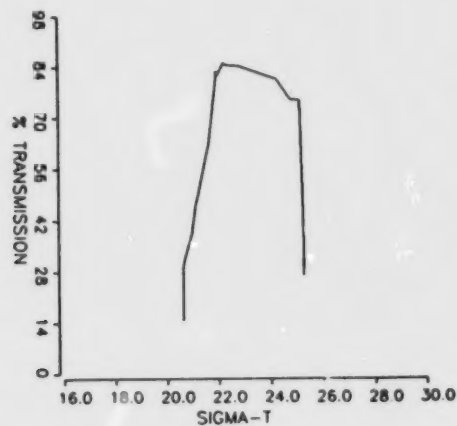
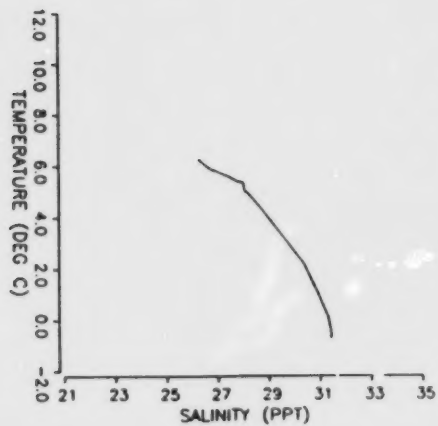
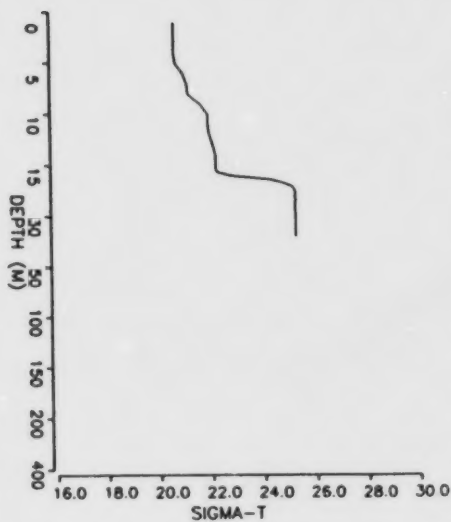
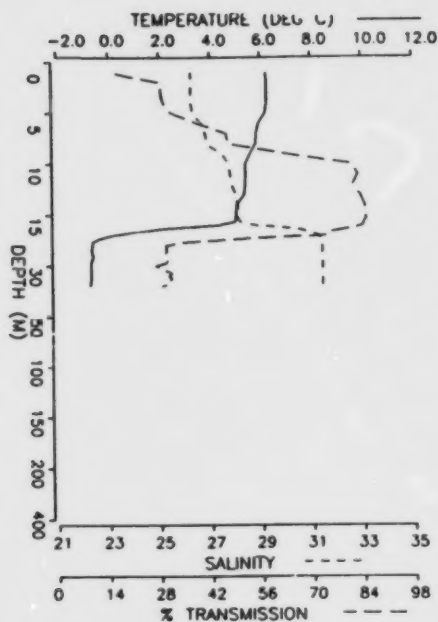


STATION 5-6C CAST # 87039
 WATER DEPTH 25.0 M
 LAT : 70 0.40 N LONG : 133 20.60 W

DATE : 02:22 ON 04/09/ 87
 INSTRUMENT : APPL MICROSYS CTD

STATION 6-6 LAT 70 7.7 N LONG 133 28.2 W DATE 15:30 PDT ON 03/09/ 87

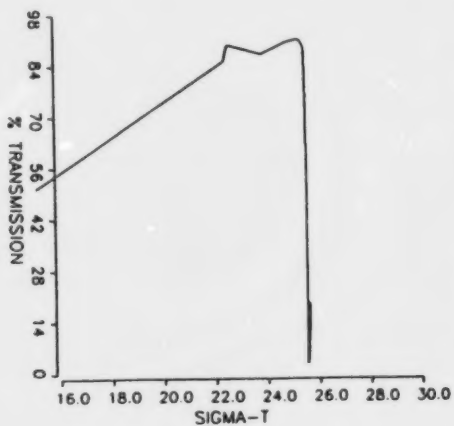
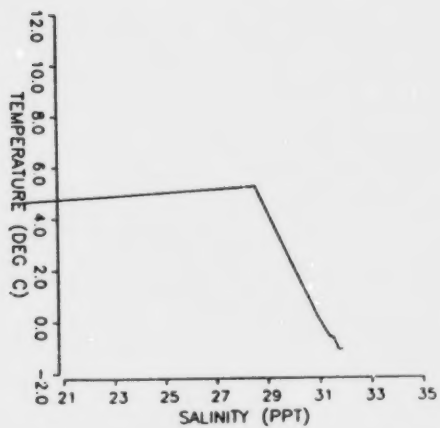
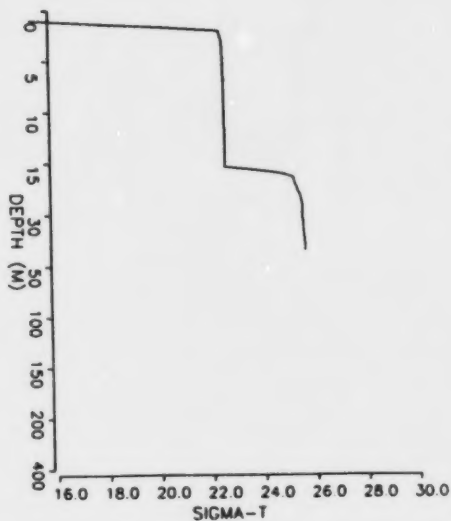
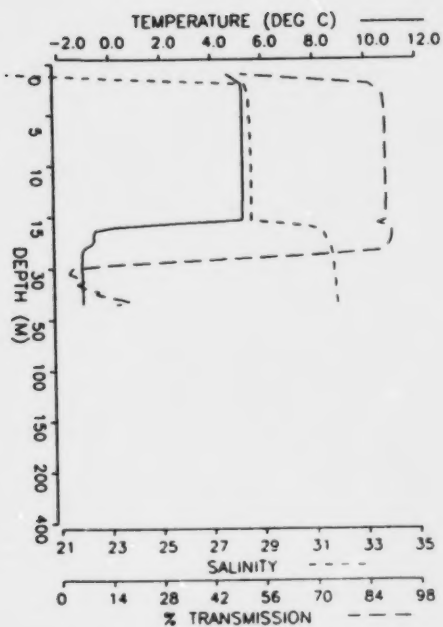
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.24	26.26	14.7	7.66	20.63	7.67	0.07
2.0	6.27	26.25	28.5	5.02	20.62	7.70	0.14
3.0	6.27	26.26	28.6	5.01	20.62	7.70	0.22
4.0	6.26	26.26	29.1	4.93	20.63	7.70	0.29
5.0	6.20	26.33	31.4	4.63	20.69	7.64	0.36
6.0	5.94	26.66	38.6	3.81	20.97	7.39	0.43
7.0	5.84	26.83	46.6	3.06	21.12	7.31	0.50
8.0	5.82	26.88	47.2	3.00	21.16	7.29	0.56
9.0	5.60	27.46	63.0	1.85	21.65	7.10	0.63
10.0	5.41	27.78	81.3	0.83	21.82	6.93	0.69
12.0	5.38	27.87	81.6	0.81	21.99	6.91	0.81
14.0	5.06	28.09	84.9	0.66	22.20	6.60	0.92
16.0	5.01	28.10	85.2	0.64	22.21	6.55	1.04
18.0	4.32	28.76	84.3	0.68	22.80	5.90	1.15
20.0	1.04	30.95	75.0	1.15	24.79	2.74	1.23
22.0	-0.38	31.41	49.9	2.78	25.23	1.35	1.28
24.0	-0.63	31.43	29.7	4.85	25.25	1.10	1.34
26.0	-0.64	31.42	29.9	4.83	25.24	1.09	1.39
28.0	-0.63	31.43	30.3	4.78	25.25	1.11	1.45
30.0	-0.69	31.43	26.9	5.25	25.25	1.05	1.50
35.0	-0.69	31.44	31.5	4.62	25.26	1.05	1.64
38.0	-0.73	31.44	28.6	5.00	25.26	1.02	1.72



STATION 6-6 CAST # 87041 DATE : 15:30 ON 03/09/ 87
 WATER DEPTH 40.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 7.70 N LONG : 133 28.20 W

STATION 7-6 LAT 70 14.4 N LONG 133 40.4 W DATE 21:48 PDT ON 31/08/ 87

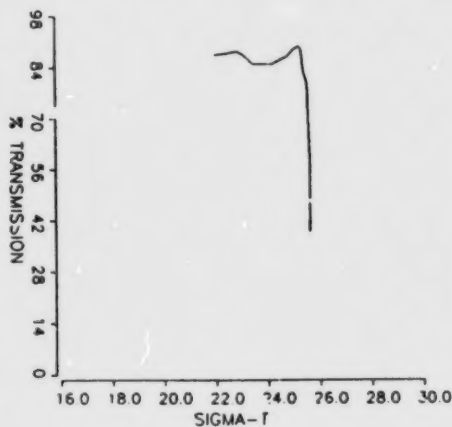
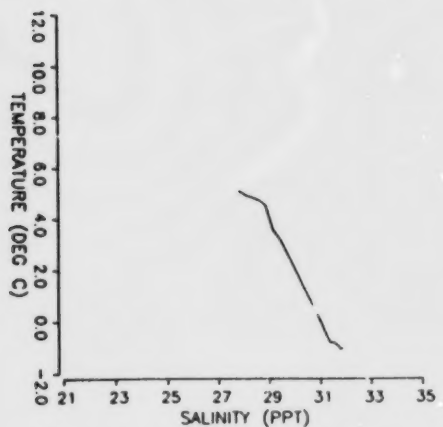
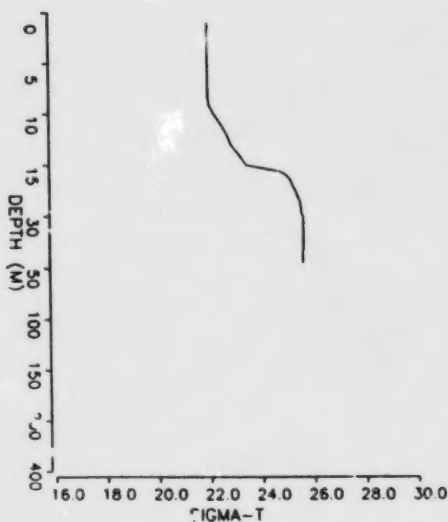
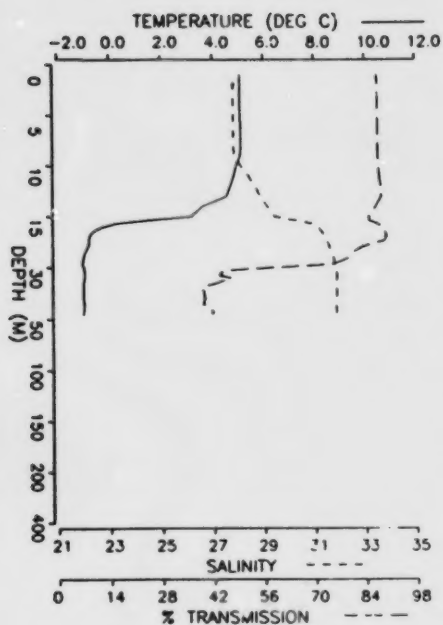
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.63	19.04	50.3	2.75	15.08	5.66	0.13
2.0	5.22	28.34	85.2	0.64	22.38	6.77	0.22
3.0	5.23	28.49	88.9	0.47	22.49	6.79	0.27
4.0	5.23	28.51	89.4	0.45	22.51	6.79	0.33
5.0	5.23	28.53	89.6	0.44	22.52	6.79	0.38
6.0	5.23	28.54	89.6	0.44	22.54	6.79	0.43
7.0	5.23	28.56	89.7	0.44	22.55	6.80	0.49
8.0	5.23	28.56	89.7	0.44	22.55	6.80	0.54
9.0	5.23	28.57	89.7	0.44	22.56	6.80	0.59
10.0	5.23	28.57	89.6	0.44	22.56	6.80	0.65
12.0	5.23	28.58	89.6	0.44	22.56	6.80	0.75
14.0	5.23	28.58	89.6	0.44	22.57	6.80	0.86
16.0	5.20	28.57	89.7	0.44	22.56	6.77	0.97
18.0	0.18	30.91	90.5	0.40	24.80	1.89	1.05
20.0	-0.61	31.40	91.2	0.37	25.22	1.12	1.11
22.0	-0.62	31.53	90.8	0.39	25.33	1.12	1.16
24.0	-0.95	31.66	89.4	0.45	25.45	0.80	1.21
26.0	-1.09	31.73	72.7	1.28	25.51	0.67	1.26
28.0	-1.09	31.75	32.7	4.47	25.52	0.66	1.31
30.0	-1.10	31.75	3.8	13.11	25.52	0.66	1.36
35.0	-1.08	31.81	6.9	10.71	25.57	0.68	1.49
40.0	-1.07	31.85	10.1	9.17	25.61	0.70	1.61
44.0	-1.06	31.88	15.7	7.41	25.62	0.71	1.70



STATION 7-6 CAST # 87042 DATE : 21:48 ON 31/08/ 87
 WATER DEPTH 49.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 14.40 N LONG : 133 40.40 W

STATION	LAT	LONG	DATE
7-6A	70 16.0 N	133 40.4 W	09:35 PDT ON 02/08/ 87

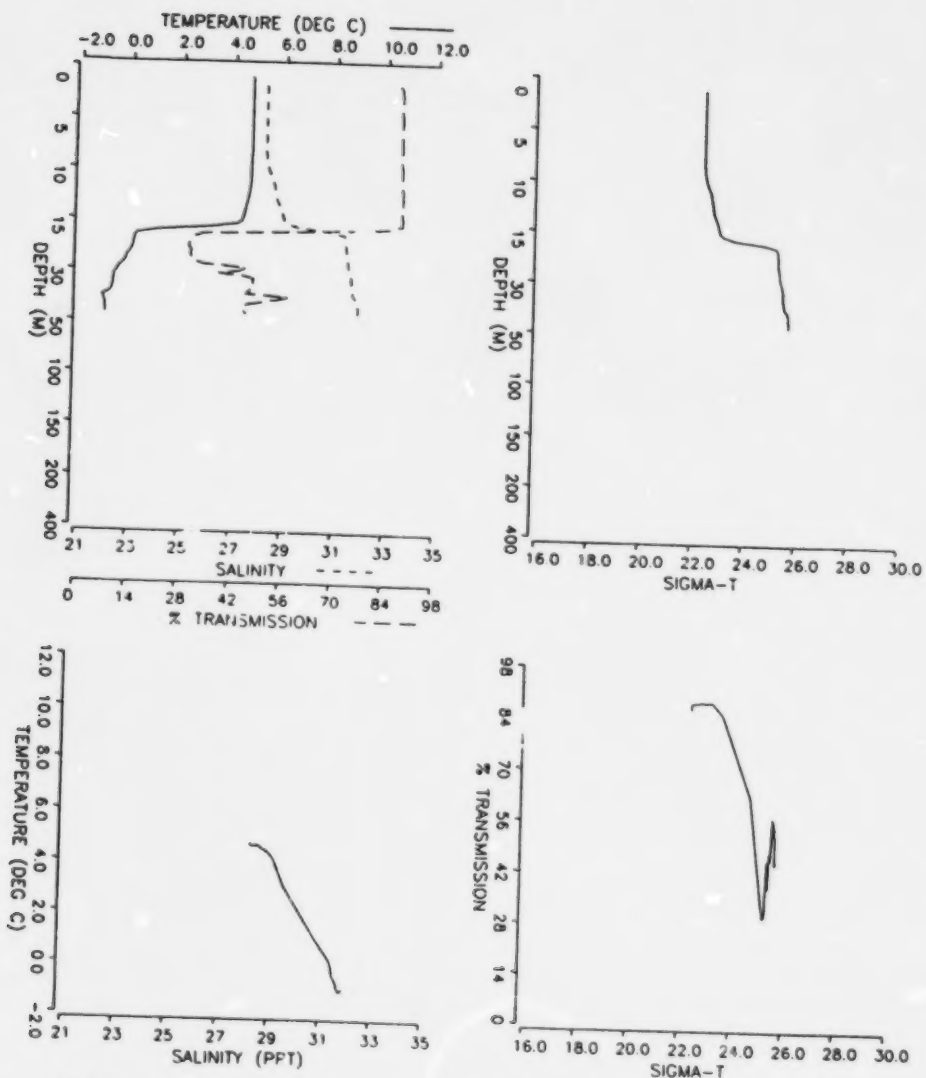
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.08	27.84	87.5	0.53	22.00	6.60	0.06
2.0	5.09	27.83	87.6	0.53	21.98	6.61	0.12
3.0	5.09	27.82	87.6	0.53	21.98	6.61	0.18
4.0	5.09	27.82	87.6	0.53	21.98	6.61	0.24
5.0	5.09	27.81	87.6	0.53	21.97	6.61	0.29
6.0	5.10	27.81	87.6	0.53	21.97	6.61	0.35
7.0	5.10	27.81	87.7	0.53	21.97	6.62	0.41
8.0	5.10	27.81	87.7	0.53	21.97	6.62	0.47
9.0	5.08	27.84	87.6	0.53	22.00	6.60	0.53
10.0	4.92	28.10	87.8	0.52	22.22	6.45	0.59
12.0	4.68	28.67	88.4	0.49	22.70	6.26	0.70
14.0	3.57	29.16	87.0	0.56	23.18	5.17	0.80
16.0	1.58	30.23	85.1	0.65	24.18	3.24	0.88
18.0	-0.26	31.14	88.9	0.47	25.00	1.45	0.95
20.0	-0.71	31.34	89.7	0.43	25.18	1.02	1.01
22.0	-0.79	31.47	89.3	0.45	25.29	0.94	1.06
24.0	-0.83	31.60	82.9	0.75	25.39	0.91	1.11
26.0	-0.97	31.72	80.4	0.87	25.50	0.78	1.17
28.0	-1.04	31.77	77.5	1.02	25.54	0.72	1.22
30.0	-1.00	31.87	58.2	2.16	25.62	0.77	1.26
35.0	-0.99	31.88	44.9	3.21	25.63	0.78	1.38
40.0	-1.00	31.87	39.4	3.72	25.62	0.77	1.50
45.0	-0.99	31.86	40.4	3.62	25.61	0.78	1.62
48.0	-1.02	31.85	41.7	3.50	25.60	0.76	1.69



STATION 7-6A CAST # 87043 DATE : 09:35 ON 02/02/ 87
 WATER DEPTH 48.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 16.00 N LONG : 133 40.40 W

STATION 7-6B LAT 70 17.2 N LONG 133 43.1 W DATE 05:01 PDT ON 03/09/ 87

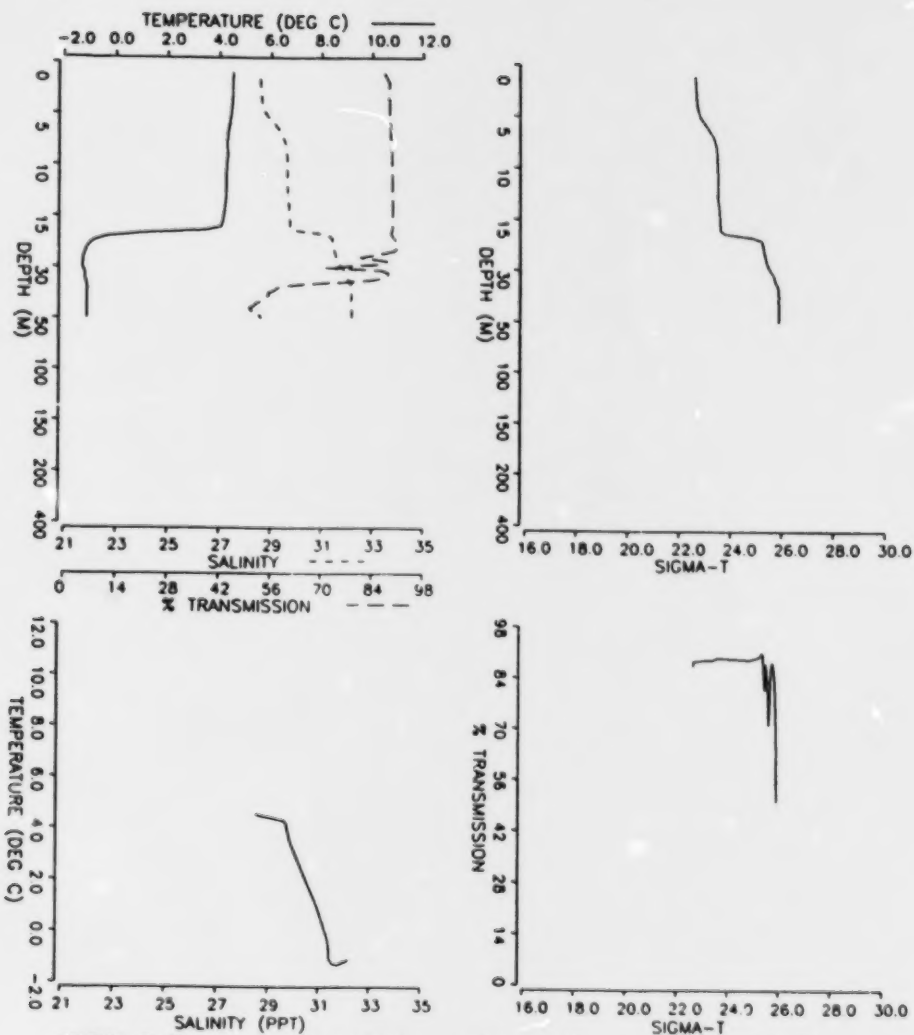
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.68	28.22	88.5	0.58	22.34	6.21	0.06
2.0	4.68	28.23	88.0	0.51	22.34	6.22	0.11
3.0	4.68	28.23	88.1	0.51	22.35	6.22	0.17
4.0	4.68	28.23	88.0	0.51	22.35	6.22	0.22
5.0	4.68	28.23	88.1	0.51	22.35	6.22	0.28
6.0	4.68	28.24	88.1	0.51	22.35	6.22	0.33
7.0	4.68	28.24	88.1	0.51	22.35	6.22	0.39
8.0	4.68	28.24	88.2	0.50	22.35	6.22	0.44
9.0	4.67	28.26	88.1	0.51	22.37	6.22	0.50
10.0	4.65	28.35	88.3	0.50	22.44	6.21	0.55
12.0	4.61	28.62	88.5	0.49	22.66	6.18	0.66
14.0	4.43	28.87	88.4	0.49	22.87	6.01	0.76
16.0	4.16	29.16	88.6	0.49	23.13	5.76	0.86
18.0	1.02	30.83	62.9	1.85	24.69	2.72	0.94
20.0	0.15	31.43	31.4	4.63	25.22	1.88	1.00
22.0	0.10	31.44	30.1	4.81	25.23	1.83	1.06
24.0	0.02	31.45	30.9	4.70	25.24	1.76	1.11
26.0	-0.16	31.50	30.8	4.71	25.29	1.58	1.17
28.0	-0.30	31.52	33.8	4.34	25.31	1.45	1.22
30.0	-0.52	31.60	43.6	3.32	25.38	1.23	1.27
35.0	-0.67	31.67	47.8	2.96	25.44	1.09	1.40
40.0	-1.07	31.80	57.4	2.22	25.57	0.70	1.53
45.0	-0.96	31.94	44.7	3.22	25.67	0.82	1.65
47.0	-0.96	31.94	45.8	3.12	25.67	0.83	1.69



STATION 7-6B CAST # 87044 DATE : 05:01 ON 03/09/ 87
 WATER DEPTH 50.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 17.20 N LONG : 133 43.10 W

STATION 7-6C LAT 70 23.3 N LONG 133 49.5 W DATE 11:59 PDT ON 03/09/ 87

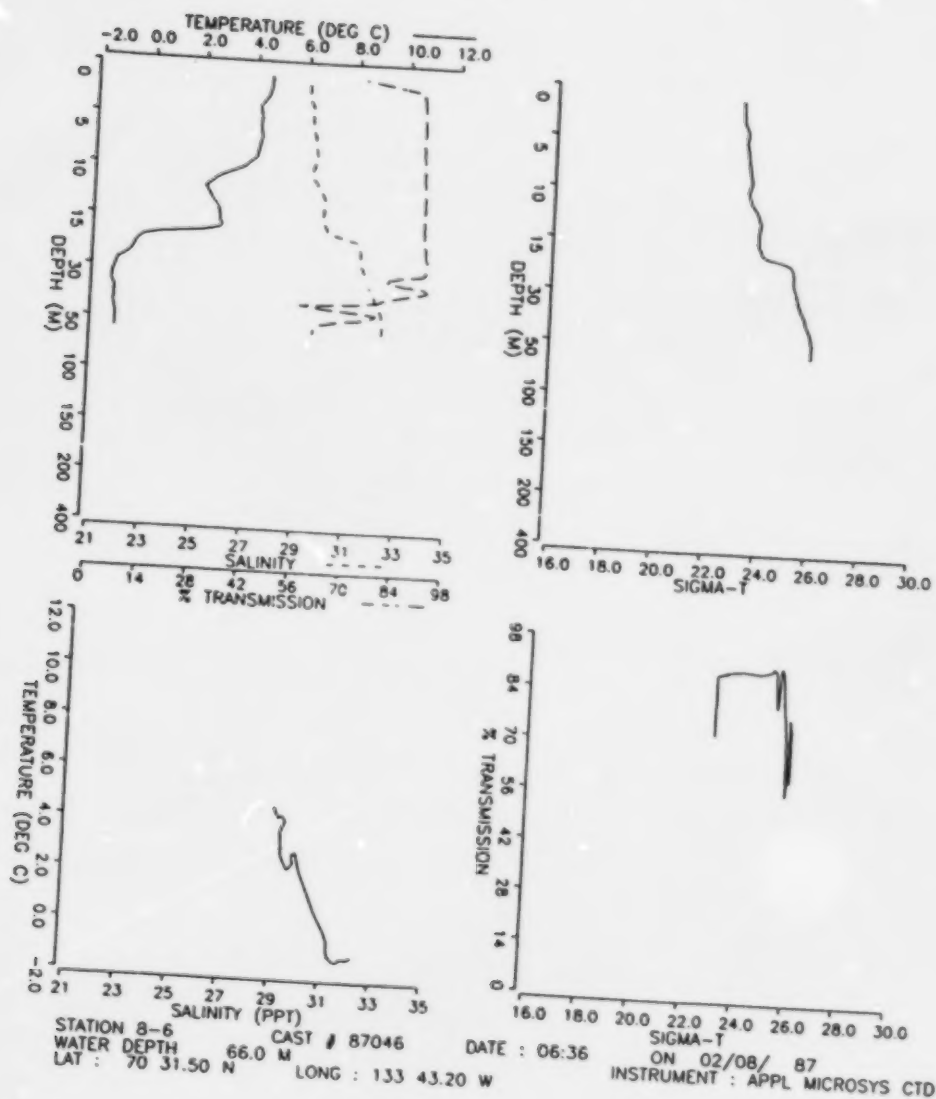
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.51	28.54	87.3	0.54	22.61	6.07	0.05
2.0	4.50	28.56	88.6	0.48	22.63	6.06	0.11
3.0	4.49	28.60	88.5	0.49	22.65	6.05	0.16
4.0	4.48	28.64	88.7	0.48	22.68	6.04	0.21
5.0	4.44	28.77	88.6	0.48	22.79	6.01	0.26
6.0	4.37	29.13	88.9	0.47	23.09	5.97	0.31
7.0	4.30	29.43	89.0	0.47	23.13	5.92	0.36
8.0	4.28	29.58	89.1	0.46	23.45	5.90	0.40
9.0	4.31	29.61	89.3	0.45	23.48	5.93	0.45
10.0	4.27	29.62	89.4	0.45	23.49	5.90	0.49
12.0	4.25	29.64	89.5	0.44	23.50	5.88	0.58
14.0	4.20	29.70	89.6	0.44	23.56	5.83	0.67
16.0	4.13	29.74	89.6	0.44	23.59	5.77	0.76
18.0	4.06	29.75	89.6	0.44	23.61	5.70	0.84
20.0	0.94	30.97	89.0	0.47	24.81	2.65	0.92
22.0	-0.83	31.44	90.6	0.40	25.26	0.91	0.98
24.0	-1.10	31.47	91.1	0.37	25.29	0.64	1.03
26.0	-1.23	31.54	85.7	0.62	25.36	0.52	1.09
28.0	-1.28	31.63	88.2	0.50	25.43	0.47	1.14
30.0	-1.30	31.79	71.1	1.37	25.56	0.46	1.19
35.0	-1.19	32.08	82.8	0.76	25.79	0.60	1.30
40.0	-1.12	32.19	55.2	2.37	25.88	0.67	1.41
45.0	-1.12	32.19	51.1	2.68	25.88	0.67	1.52
50.0	-1.13	32.20	53.2	2.52	25.89	0.67	1.62



STATION 7-6C CAST # 87045 DATE : 11 59 ON 03/09/ 87
 WATER DEPTH 52.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 23.30 N LONG : 133 49.50 W

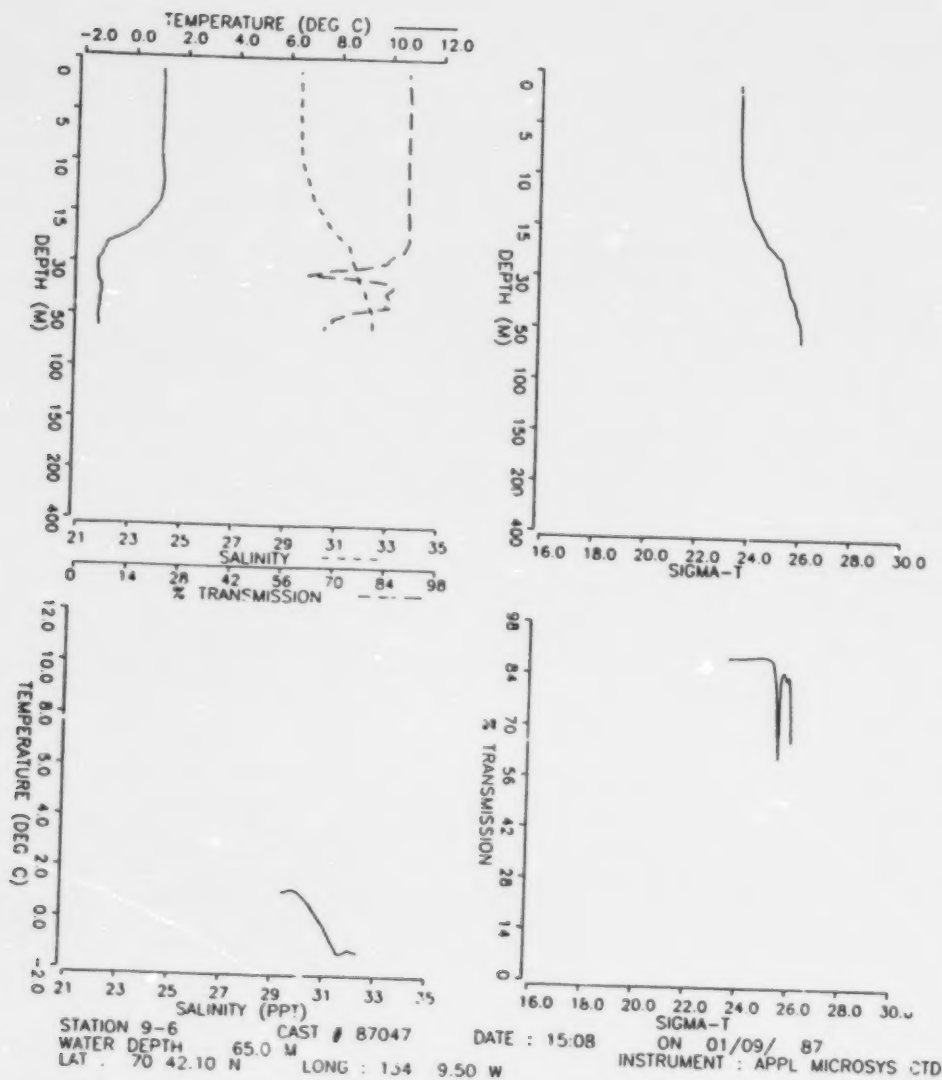
STATION	LAT	LONG	DATE
8-6	70 31.5 N	133 43.2 W	06:36 PDT ON 02/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.57	29.03	71.9	1.32	22.99	6.16	0.05
2.0	4.55	29.06	87.8	0.52	23.02	6.14	0.10
3.0	4.45	29.07	88.3	0.50	23.03	6.03	0.15
4.0	4.14	29.25	88.7	0.48	23.21	5.73	0.19
5.0	4.21	29.22	88.7	0.48	23.17	5.81	0.24
6.0	4.20	29.27	88.7	0.48	23.21	5.80	0.29
7.0	4.25	29.36	88.7	0.48	23.28	5.85	0.34
8.0	4.16	29.42	88.8	0.48	23.33	5.77	0.38
9.0	4.05	29.49	88.9	0.47	23.40	5.66	0.43
10.0	3.60	29.31	89.1	0.46	23.30	5.20	0.47
12.0	2.13	29.64	89.5	0.44	23.67	3.76	0.56
14.0	2.66	29.79	89.5	0.44	23.76	4.30	0.65
16.0	2.72	29.82	89.5	0.44	23.77	4.36	0.73
18.0	2.73	29.95	89.6	0.44	23.88	4.38	0.81
20.0	0.48	30.78	89.2	0.46	24.68	2.18	0.89
22.0	-0.40	31.26	90.1	0.42	25.10	1.32	0.95
24.0	-0.57	31.32	90.1	0.42	25.16	1.16	1.00
26.0	-0.75	31.33	90.7	0.39	25.17	0.99	1.06
28.0	-1.18	31.39	90.5	0.40	25.23	0.56	1.12
30.0	-1.28	31.49	89.6	0.44	25.31	0.46	1.17
35.0	-1.40	31.68	89.9	0.42	25.47	0.36	1.30
40.0	-1.28	31.94	79.3	0.93	25.68	0.50	1.42
45.0	-1.27	32.19	70.6	1.39	25.89	0.52	1.53
50.0	-1.20	32.29	63.0	1.85	25.96	0.61	1.64
55.0	-1.20	32.29	60.1	2.03	25.96	0.61	1.74
60.0	-1.20	32.26	59.8	2.06	25.94	0.61	1.84



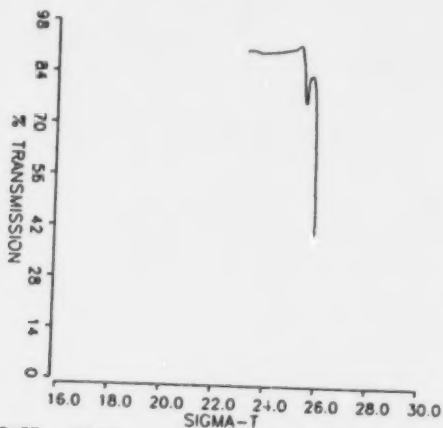
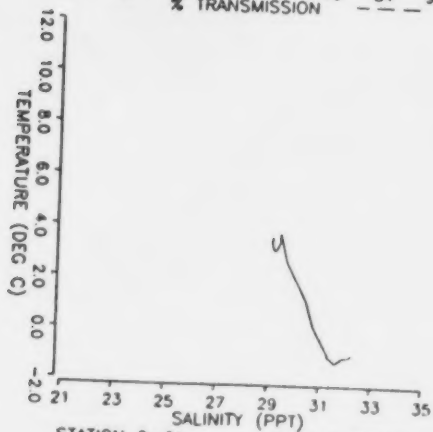
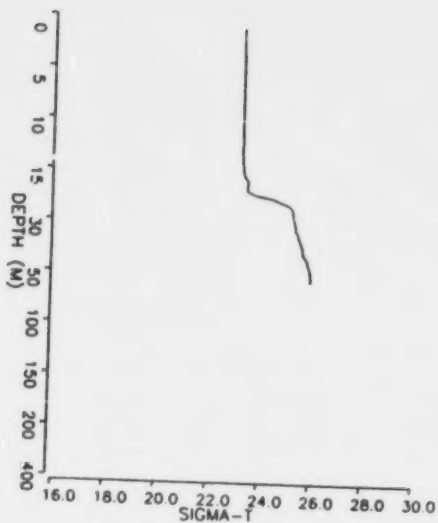
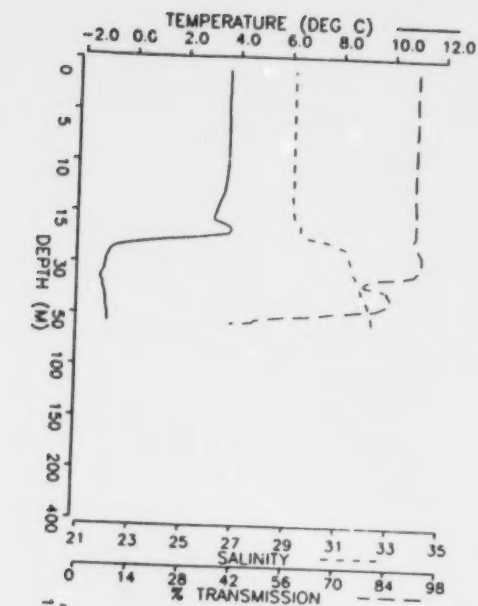
STATION	LAT	LONG	DATE
9-6	70 42.1 N	134 9.5 W	15:08 PDT ON 01/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	1.05	29.40	88.5	0.49	23.54	2.66	0.04
2.0	1.06	29.41	88.5	0.49	23.55	2.67	0.09
3.0	1.06	29.42	88.8	0.48	23.56	2.67	0.13
4.0	1.06	29.41	88.9	0.47	23.55	2.67	0.18
5.0	1.06	29.42	88.8	0.48	23.56	2.67	0.22
6.0	1.06	29.43	88.8	0.48	23.57	2.67	0.26
7.0	1.06	29.45	88.8	0.47	23.58	2.67	0.31
8.0	1.05	29.46	88.8	0.47	23.59	2.66	0.35
9.0	1.05	29.48	88.8	0.48	23.60	2.66	0.39
10.0	1.06	29.52	88.7	0.48	23.64	2.68	0.44
12.0	1.15	29.80	88.8	0.48	23.85	2.78	0.52
14.0	1.03	30.05	88.9	0.47	24.06	2.68	0.60
16.0	0.65	30.43	89.0	0.47	24.39	2.32	0.67
18.0	0.40	30.58	89.0	0.46	24.52	2.09	0.74
20.0	0.19	30.73	89.2	0.46	24.65	1.88	0.81
22.0	-0.28	31.06	89.2	0.46	24.94	1.43	0.87
24.0	-0.89	31.36	88.6	0.49	25.20	0.85	0.93
26.0	-1.05	31.45	87.6	0.53	25.28	0.69	0.99
28.0	-1.14	31.54	83.9	0.70	25.35	0.61	1.04
30.0	-1.34	31.62	79.3	0.93	25.42	0.41	1.09
35.0	-1.29	31.77	74.9	1.15	25.54	0.47	1.22
40.0	-1.19	32.04	83.7	0.71	25.76	0.59	1.34
45.0	-1.24	32.19	82.7	0.76	25.88	0.56	1.44
50.0	-1.28	32.33	70.6	1.39	26.00	0.52	1.55
55.0	-1.29	32.34	68.5	1.51	26.01	0.53	1.65
60.0	-1.26	32.35	66.6	1.63	26.01	0.55	1.75
63.0	-1.26	32.35	66.2	1.65	26.01	0.56	1.81



STATION 9-6A LAT 70 39.0 N LONG 134 30.4 W DATE 05:39 PDT ON 02/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	3.61	29.12	90.5	0.40	23.15	5.20	0.05
2.0	3.61	29.12	90.5	0.40	23.15	5.20	0.10
3.0	3.61	29.13	90.5	0.40	23.15	5.20	0.14
4.0	3.61	29.13	90.4	0.40	23.15	5.20	0.19
5.0	3.61	29.13	90.5	0.40	23.15	5.20	0.24
6.0	3.61	29.13	90.5	0.40	23.16	5.20	0.29
7.0	3.61	29.13	90.5	0.40	23.15	5.21	0.33
8.0	3.62	29.13	90.4	0.40	23.16	5.21	0.38
9.0	3.62	29.13	90.4	0.40	23.16	5.21	0.43
10.0	3.61	29.14	90.4	0.40	23.16	5.21	0.48
12.0	3.54	29.15	90.3	0.41	23.17	5.14	0.57
14.0	3.30	29.13	90.4	0.41	23.18	4.90	0.67
16.0	3.10	29.19	90.5	0.40	23.24	4.70	0.76
18.0	3.45	29.44	90.6	0.40	23.41	5.06	0.85
20.0	3.77	29.43	90.6	0.40	23.38	5.39	0.94
22.0	2.65	29.71	89.9	0.43	23.69	4.29	1.03
24.0	0.11	30.78	90.7	0.39	24.70	1.81	1.10
26.0	-0.88	31.30	91.8	0.34	25.15	0.85	1.16
28.0	-1.01	31.33	92.1	0.33	25.18	0.73	1.22
30.0	-1.08	31.41	92.0	0.33	25.25	0.66	1.28
35.0	-1.27	31.59	80.0	0.89	25.40	0.49	1.41
40.0	-1.16	31.81	82.9	0.75	25.57	0.61	1.53
45.0	-1.07	32.06	82.9	0.75	25.77	0.72	1.65
50.0	-1.00	32.22	60.7	2.00	25.90	0.80	1.76
55.0	-0.98	32.25	46.7	3.04	25.93	0.82	1.86
58.0	-0.98	32.23	40.2	3.64	25.91	0.83	1.93



STATION 9-6A

CAST # 87048

DATE : 05:39

SIGMA-T

WATER DEPTH 60.0 M

ON 02/09/ 87

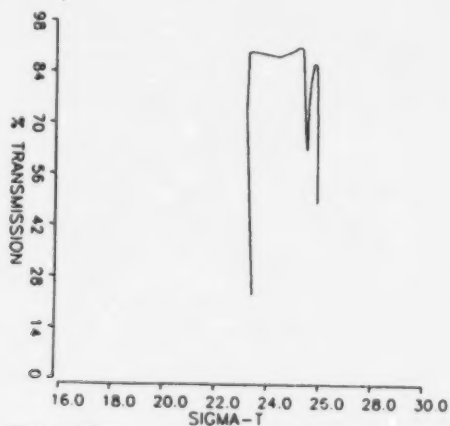
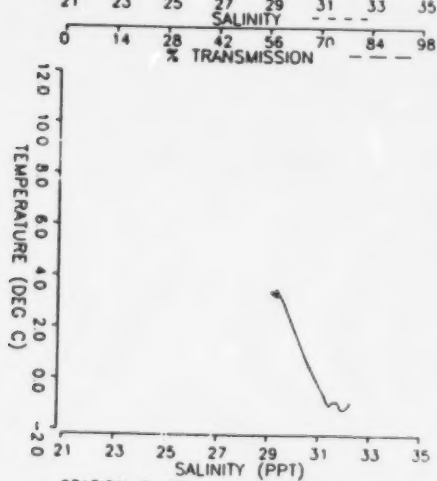
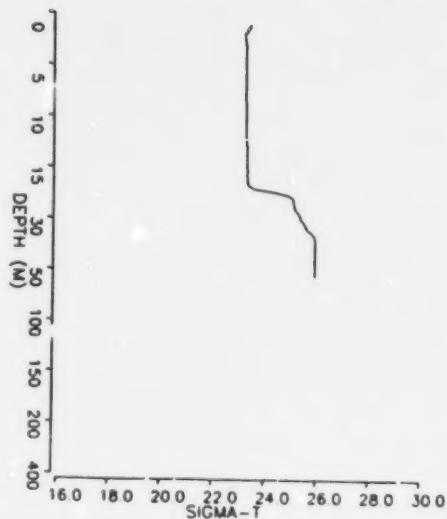
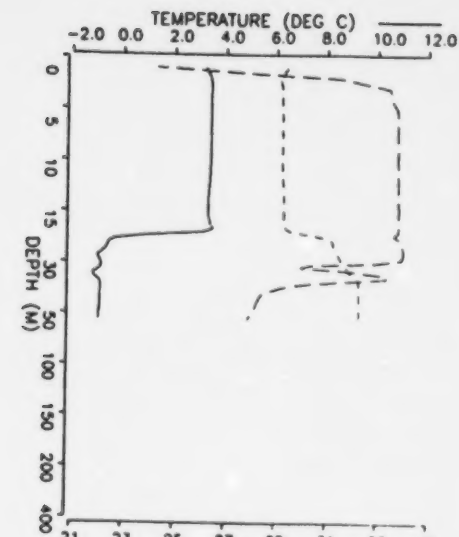
LAT : 70 39.00 N

LONG : 134 30.40 W

INSTRUMENT : APPL MICROSYS CTD

STATION 9-6B LAT 70 39.1 N 134 LONG 38.1 W DATE 00:01 PDT ON 02/08/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	3.18	29.42	23.1	5.87	23.42	4.78	0.04
2.0	3.39	29.14	73.5	1.23	23.18	4.98	0.09
3.0	3.40	29.21	87.4	0.54	23.24	5.00	0.14
4.0	3.40	29.22	87.6	0.53	23.24	5.00	0.18
5.0	3.40	29.22	89.4	0.45	23.24	5.00	0.23
6.0	3.40	29.22	89.4	0.45	23.24	5.00	0.28
7.0	3.40	29.22	89.5	0.44	23.25	5.00	0.33
8.0	3.39	29.23	89.5	0.45	23.25	4.99	0.37
9.0	3.39	29.23	89.6	0.44	23.25	4.99	0.42
10.0	3.38	29.23	89.5	0.44	23.25	4.99	0.47
12.0	3.35	29.24	89.7	0.44	23.26	4.96	0.56
14.0	3.30	29.29	89.6	0.44	23.30	4.91	0.65
16.0	3.30	29.29	89.6	0.44	23.31	4.91	0.74
18.0	3.34	29.31	89.8	0.43	23.32	4.96	0.84
20.0	3.48	29.37	89.7	0.44	23.35	5.10	0.93
22.0	0.85	30.48	88.4	0.49	24.42	2.53	1.01
24.0	-0.57	31.22	90.5	0.40	25.08	1.15	1.07
26.0	-0.69	31.26	91.0	0.38	25.12	1.04	1.13
28.0	-1.02	31.44	91.0	0.38	25.27	0.72	1.19
30.0	-0.87	31.58	82.9	0.75	25.38	0.87	1.24
35.0	-1.17	32.03	86.5	0.58	25.75	0.61	1.36
40.0	-0.90	32.25	57.0	2.25	25.92	0.89	1.47
45.0	-0.91	32.25	50.7	2.71	25.92	0.89	1.57
50.0	-0.94	32.25	49.4	2.82	25.93	0.86	1.68
55.0	-0.95	32.25	48.2	2.92	25.93	0.85	1.78
56.0	-0.96	32.26	48.1	2.93	25.93	0.85	1.80



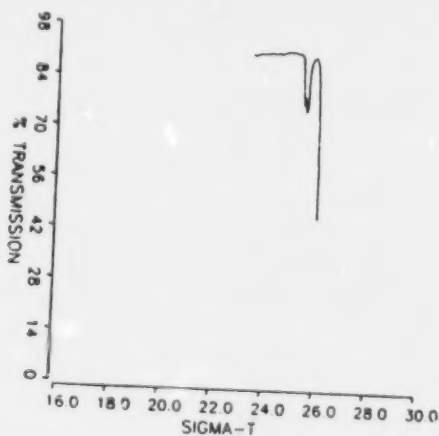
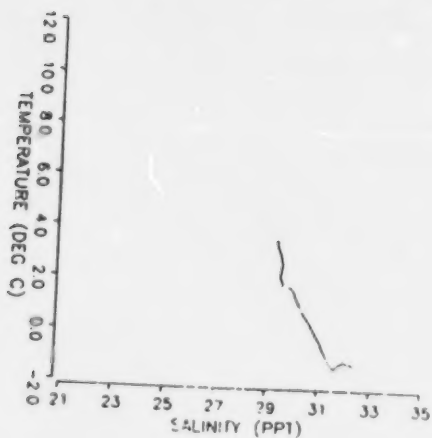
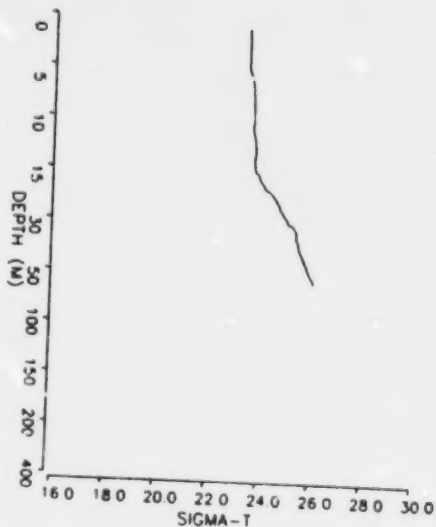
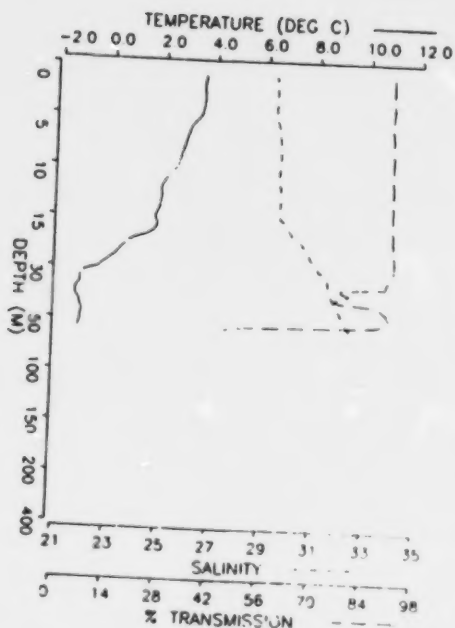
STATION 9-68 CAST # 87049
 WATER DEPTH 65.0 M
 LAT : 70 39.10 N LONG : 134 38.10 W

DATE : 00:01

ON 02/08/ 87
 INSTRUMENT : APPL MICROSYS CTD

STATION 9-6C LAT 70 40.3 N LONG 134 18.9 W DATE 01:37 PDT ON 02/08/ 87

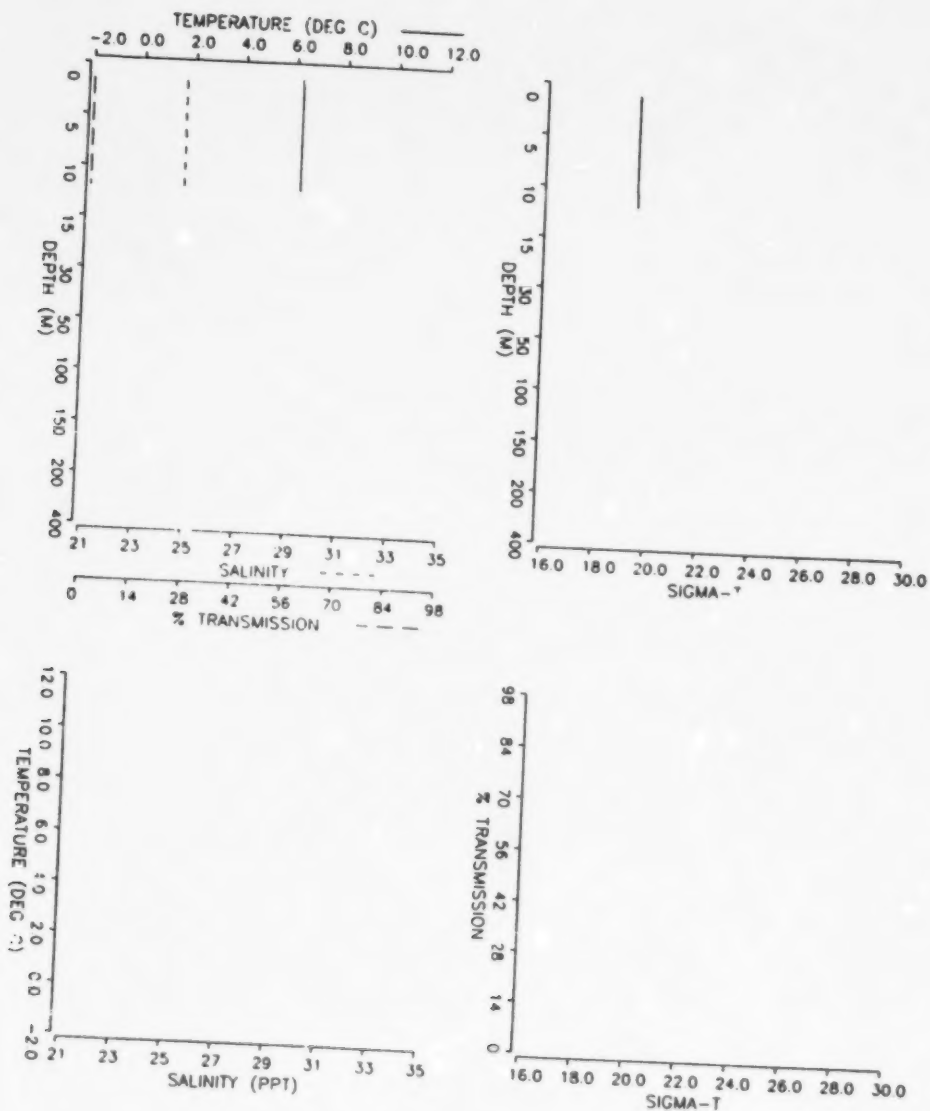
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	3.57	29.33	90.4	0.40	23.31	5.17	0.05
2.0	3.51	29.36	90.4	0.40	23.34	5.11	0.09
3.0	3.52	29.36	90.5	0.40	23.34	5.13	0.14
4.0	3.51	29.35	90.5	0.40	23.34	5.11	0.18
5.0	3.39	29.34	90.3	0.41	23.34	4.99	0.23
6.0	3.03	29.48	90.2	0.41	23.48	4.65	0.27
7.0	2.88	29.51	90.6	0.40	23.52	4.50	0.32
8.0	2.76	29.54	90.6	0.39	23.55	4.38	0.36
9.0	2.63	29.55	90.6	0.39	23.57	4.25	0.41
10.0	2.53	29.54	90.6	0.39	23.56	4.15	0.45
12.0	1.90	29.58	90.8	0.39	23.64	3.52	0.54
14.0	1.86	29.55	90.8	0.39	23.61	3.48	0.62
16.0	1.75	29.78	90.8	0.38	23.81	3.39	0.71
18.0	1.73	29.89	90.8	0.38	23.90	3.38	0.79
20.0	1.41	30.08	91.1	0.37	24.07	3.06	0.87
22.0	0.71	30.42	91.2	0.37	24.38	2.38	0.94
24.0	0.43	30.63	91.2	0.37	24.56	2.12	1.01
26.0	0.19	30.76	91.4	0.36	24.67	1.88	1.08
28.0	-0.16	30.95	91.5	0.36	24.85	1.55	1.14
30.0	-0.48	31.12	91.4	0.36	25.00	1.24	1.20
35.0	-1.15	31.49	89.4	0.45	25.31	0.59	1.34
40.0	-1.34	31.64	78.2	0.98	25.44	0.42	1.47
45.0	-1.13	31.89	88.6	0.48	25.64	0.64	1.60
50.0	-1.12	32.16	89.1	0.46	25.85	0.68	1.71
55.0	-1.17	32.32	70.7	1.39	25.98	0.64	1.81
59.0	-1.19	32.34	45.5	3.15	26.00	0.62	1.89



STATION C-6C CAST # 87050 DATE : 01:37 ON 02/08/ 87
 WATER DEPTH 65.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 40.30 N LONG : 134 18.90 W

STATION LAT LONG DATE
 P1-6 69 54.1 N 133 42.7 W 08:14 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.24	24.67	0.0	36.84	19.38	7.58	0.08
2.0	6.25	24.66	0.0	36.84	19.37	7.59	0.17
3.0	6.25	24.67	0.0	36.84	19.37	7.59	0.25
4.0	6.25	24.67	0.0	36.84	19.37	7.60	0.34
5.0	6.25	24.66	0.0	36.84	19.37	7.60	0.42
6.0	6.25	24.66	0.0	36.84	19.37	7.60	0.51
7.0	6.25	24.67	0.0	36.84	19.38	7.60	0.59
8.0	6.25	24.67	0.0	36.84	19.38	7.60	0.67
9.0	6.25	24.67	0.0	36.84	19.38	7.60	0.76
10.0	6.25	24.67	0.0	36.84	19.38	7.60	0.84
12.0	6.25	24.68	0.0	36.84	19.38	7.60	1.01



STATION P1-6 CAST # 87059 DATE : 08:14 ON 05/09/ 87
 WATER DEPTH 15.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 54.10 N LONG : 133 42.70 W

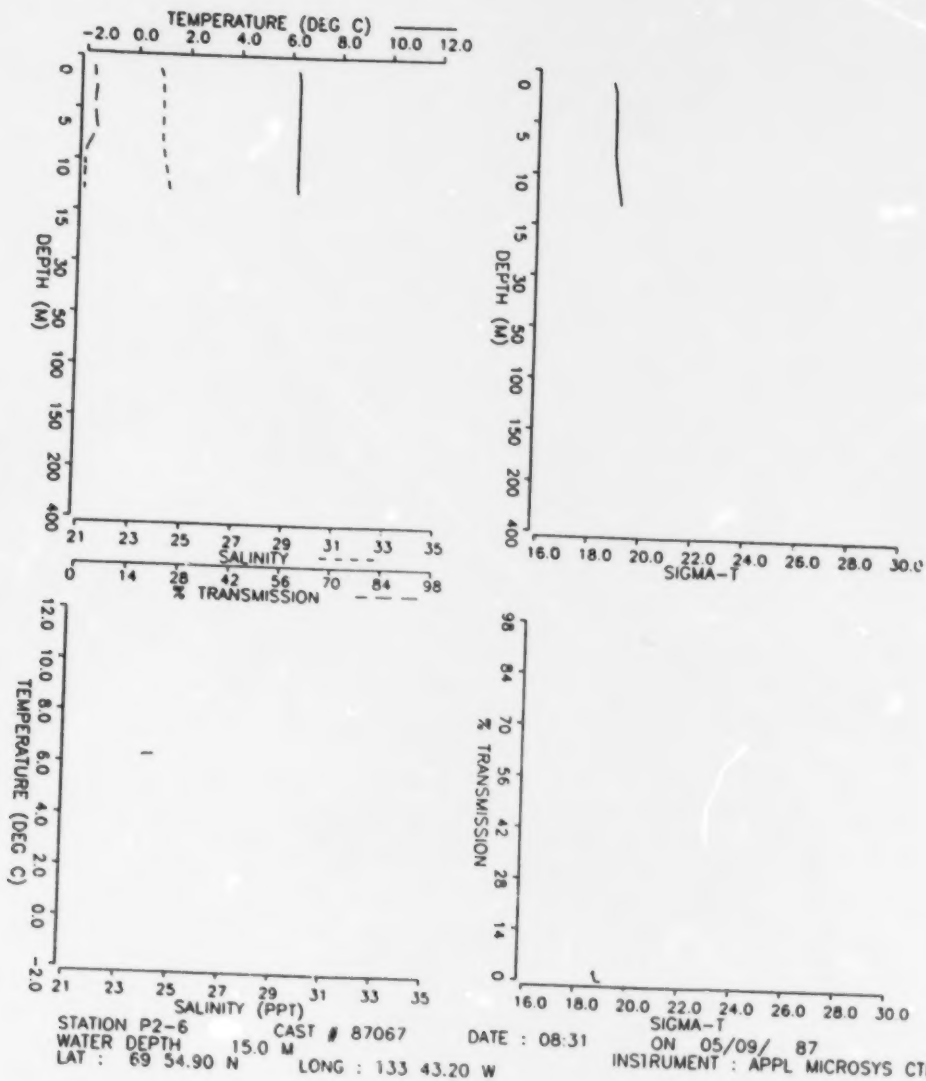
STATION
P2-6

LAT
69 54.9 N

LONG
133 43.2 W

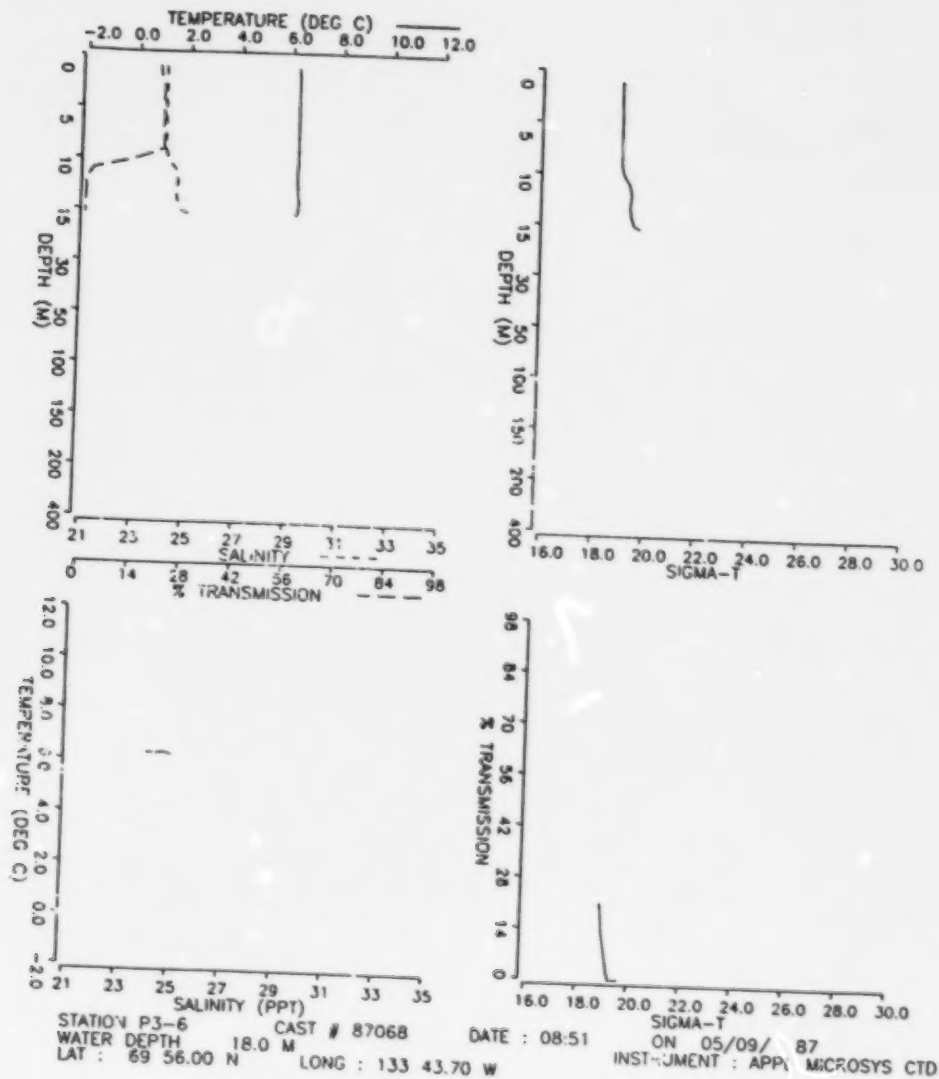
DATE
08:31 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.26	23.83	2.1	15.42	18.71	7.55	0.09
2.0	6.33	23.95	2.3	15.10	18.80	7.63	0.18
3.0	6.33	23.96	2.8	14.33	18.81	7.63	0.27
4.0	6.33	23.97	2.4	14.98	18.81	7.63	0.36
5.0	6.33	23.97	2.5	14.70	18.81	7.63	0.45
6.0	6.33	23.97	2.6	14.59	18.81	7.63	0.54
7.0	6.33	23.96	3.0	13.98	18.81	7.63	0.63
8.0	6.33	23.98	1.7	16.37	18.83	7.64	0.72
9.0	6.33	24.02	0.4	22.61	18.86	7.64	0.81
10.0	6.32	24.09	0.0	36.84	18.91	7.64	0.90
12.0	6.33	24.23	0.0	36.84	19.02	7.65	1.07
13.0	6.34	24.31	0.0	36.84	19.08	7.66	1.16



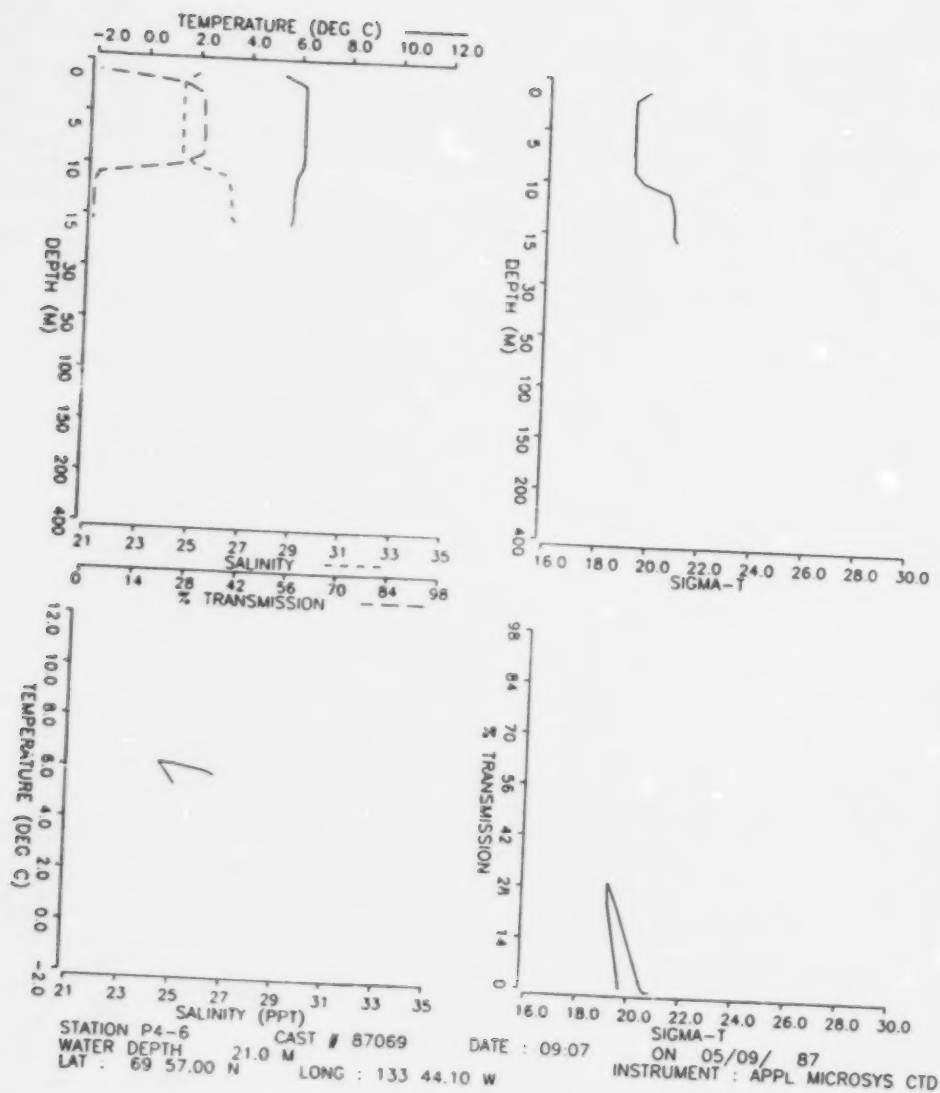
STATION	LAT		LONG		DATE		
P3-6	69	56.0 N	133	43.7 W	08:51 PDT	ON	05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.26	24.07	19.7	6.50	18.90	7.56	0.09
2.0	6.27	24.07	20.1	6.43	18.90	7.58	0.18
3.0	6.27	24.07	20.9	6.26	18.90	7.58	0.27
4.0	6.28	24.08	20.8	6.29	18.91	7.59	0.36
5.0	6.28	24.08	20.8	6.28	18.91	7.59	0.44
6.0	6.27	24.08	21.0	6.23	18.91	7.59	0.53
7.0	6.27	24.08	20.6	6.31	18.91	7.59	0.62
8.0	6.27	24.08	21.0	6.24	18.91	7.59	0.71
9.0	6.27	24.08	21.0	6.24	18.91	7.59	0.80
10.0	6.27	24.18	13.2	8.11	18.99	7.59	0.89
12.0	6.25	24.58	0.0	36.84	19.31	7.59	1.06
14.0	6.30	24.56	0.0	36.84	19.29	7.64	1.23
16.0	6.18	25.04	0.0	36.84	19.68	7.55	1.40



STATION P4-6 LAT 69 57.0 N LONG 133 44.1 W DATE 09:07 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.33	24.99	0.6	20.26	19.72	6.69	0.08
2.0	6.17	24.38	23.8	5.75	19.16	7.50	0.16
3.0	6.20	24.37	28.9	4.97	19.15	7.52	0.25
4.0	6.20	24.37	29.2	4.92	19.15	7.52	0.34
5.0	6.20	24.37	29.3	4.91	19.15	7.53	0.42
6.0	6.20	24.37	29.4	4.90	19.15	7.53	0.51
7.0	6.20	24.38	29.7	4.86	19.15	7.53	0.60
8.0	6.20	24.38	29.4	4.90	19.15	7.53	0.68
9.0	6.20	24.38	29.3	4.91	19.15	7.53	0.77
10.0	6.15	24.85	23.1	5.86	19.53	7.50	0.85
12.0	5.87	26.26	0.0	36.73	20.67	7.31	1.00
14.0	5.83	26.36	0.0	36.84	20.75	7.27	1.15
16.0	5.78	26.44	0.0	36.84	20.82	7.21	1.29
17.0	5.72	26.52	0.0	36.84	20.89	7.18	1.36



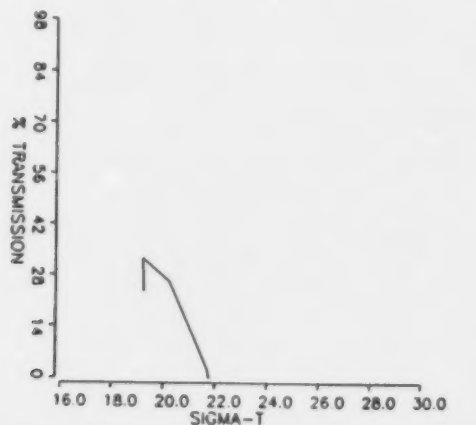
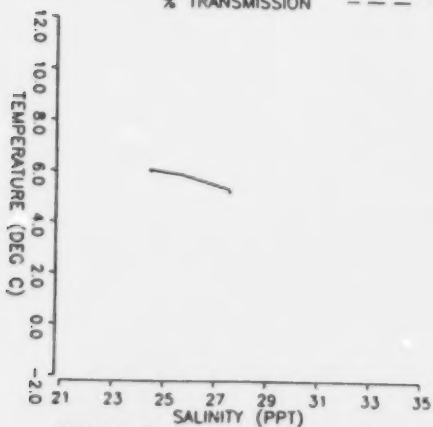
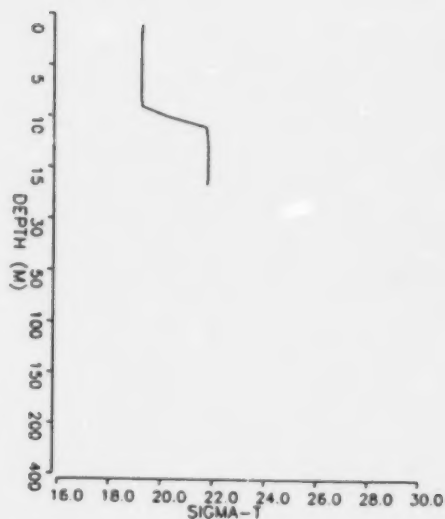
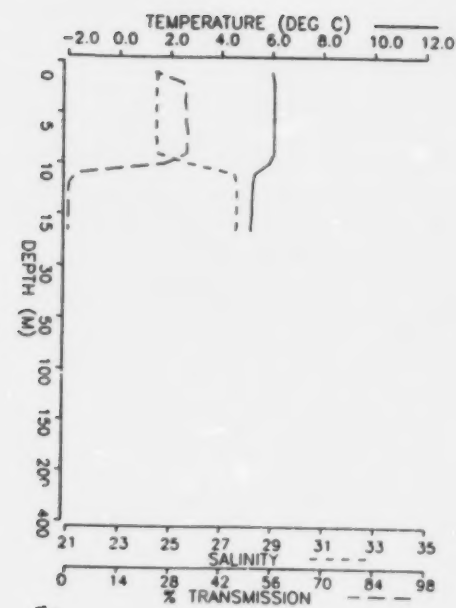
STATION
P5-6

LAT
69 58.2 N

LONG
133 40.3 W

DATE
09:32 PDT ON 05/09/ 87

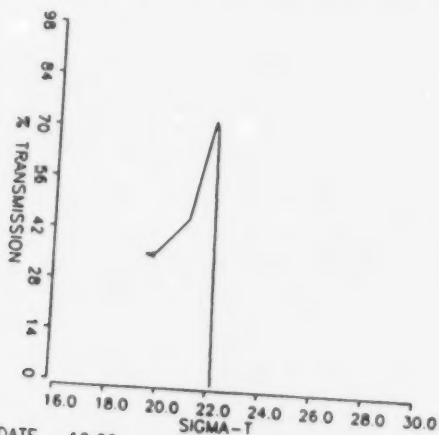
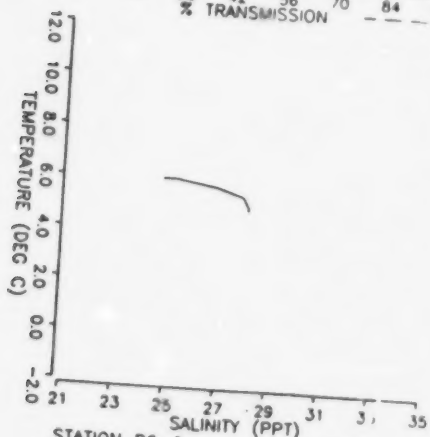
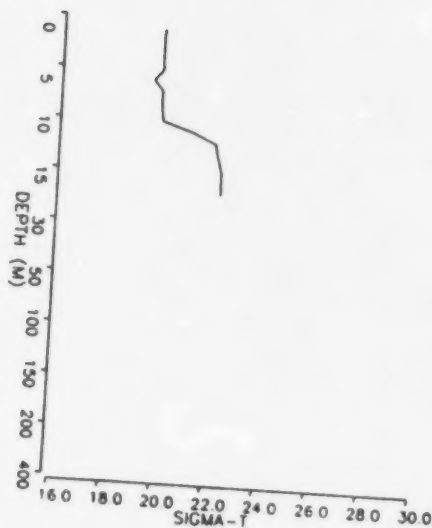
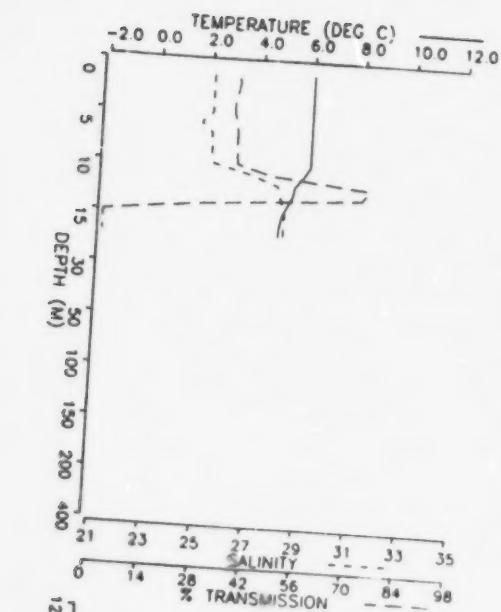
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.98	24.48	23.6	5.77	19.26	7.31	0.09
2.0	6.06	24.44	31.3	4.65	19.21	7.39	0.17
3.0	6.06	24.44	32.1	4.55	19.21	7.39	0.26
4.0	6.06	24.44	31.9	4.58	19.21	7.39	0.34
5.0	6.06	24.44	32.2	4.54	19.21	7.39	0.43
6.0	6.06	24.44	32.1	4.54	19.21	7.39	0.51
7.0	6.06	24.44	32.7	4.47	19.21	7.39	0.60
8.0	6.06	24.44	32.4	4.51	19.21	7.39	0.69
9.0	6.06	24.47	32.4	4.51	19.24	7.39	0.77
10.0	5.86	25.71	26.3	5.35	20.23	7.27	0.85
12.0	5.23	27.58	0.2	25.28	21.78	6.74	0.98
14.0	5.19	27.60	0.0	32.28	21.79	6.70	1.10
16.0	5.17	27.58	0.0	36.84	21.78	6.68	1.22
18.0	5.14	27.59	0.0	36.84	21.79	6.68	1.35
20.0	5.16	27.53	0.0	36.84	21.75	6.68	1.47



STATION P5-6 CAST # 87070 DATE : 09:32 ON 05/09/ 87
 WATER DEPTH 23.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 69 58.20 N LONG : 133 40.30 W

STATION LAT LONG DATE
P6-6 69 59.3 N 133 41.5 W 10:09 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.99	25.08	35.2	4.18	19.72	7.36	0.08
2.0	6.01	25.07	35.8	4.11	19.72	7.37	0.16
3.0	6.01	25.08	35.2	4.17	19.72	7.37	0.24
4.0	6.01	25.08	34.5	4.26	19.72	7.37	0.32
5.0	6.01	25.08	34.5	4.26	19.73	7.37	0.40
6.0	6.01	24.65	35.5	4.14	19.38	7.35	0.49
7.0	6.01	25.08	35.6	4.14	19.73	7.37	0.57
8.0	6.01	25.08	35.6	4.13	19.73	7.37	0.65
9.0	6.00	25.10	35.7	4.12	19.74	7.37	0.73
10.0	5.99	25.18	35.9	4.10	19.80	7.37	0.81
12.0	5.43	27.77	72.6	1.28	21.90	6.95	0.95
14.0	5.14	27.98	25.6	5.45	22.10	6.67	1.07
16.0	4.93	28.05	0.0	36.84	22.18	6.47	1.16
18.0	4.88	28.05	0.0	36.84	22.18	6.42	1.29
20.0	4.86	28.05	0.0	36.84	22.18	6.40	1.41
21.0	4.85	28.05	0.0	36.84	22.18	6.40	1.48



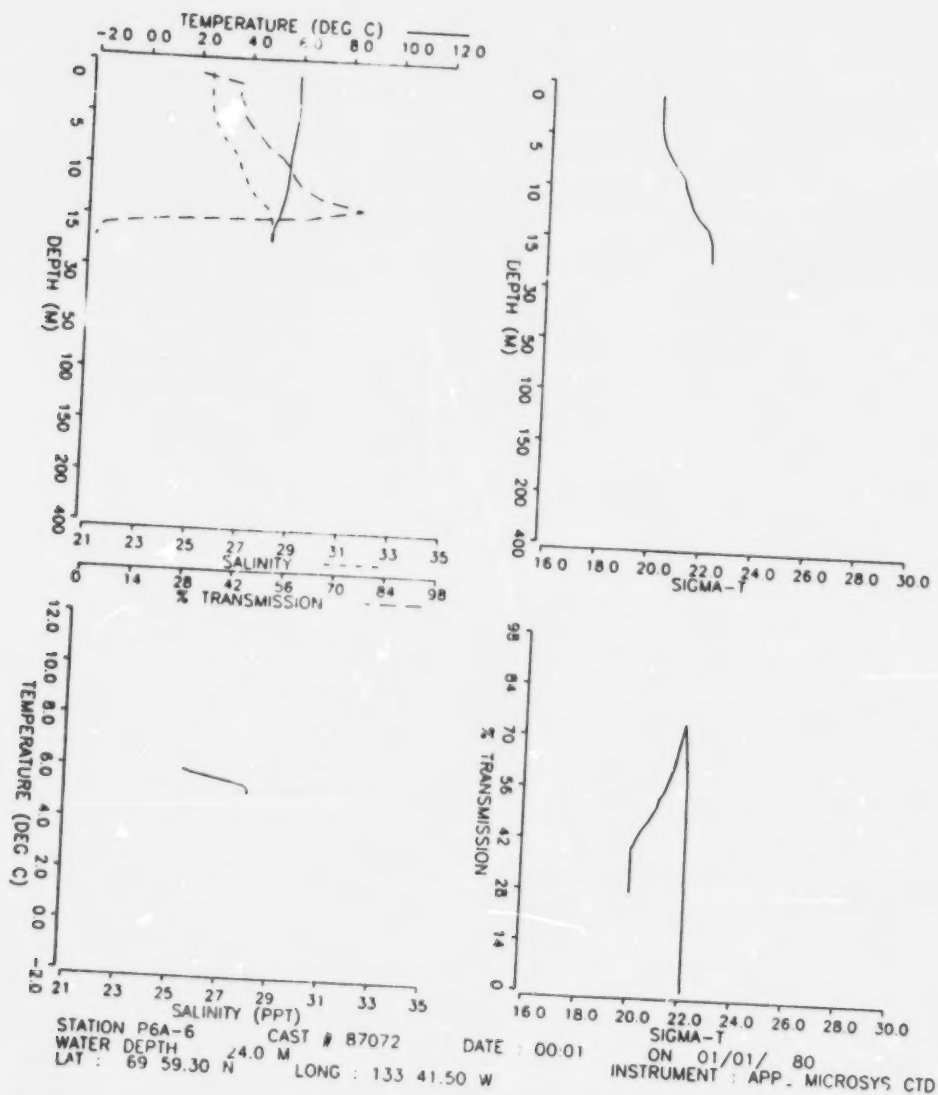
STATION P6-6
WATER DEPTH 23.0 M
LAT : 69 59.30 N
LONG : 133 41.50 W

DATE : 10:09

ON 05/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION LAT LONG DATE
 P6A-6 69 59.3 N 133 41.5 W 00:01 PDT ON 01/01/ 80

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.91	25.44	27.7	5.13	20.02	7.29	0.08
2.0	5.91	25.44	39.9	3.68	20.01	7.30	0.16
3.0	5.91	25.45	38.7	3.80	20.02	7.30	0.23
4.0	5.92	25.44	39.9	3.67	20.02	7.30	0.31
5.0	5.90	25.51	40.2	3.65	20.08	7.29	0.39
6.0	5.84	25.66	42.3	3.44	20.20	7.24	0.47
7.0	5.78	25.91	44.9	3.20	20.40	7.20	C.54
8.0	5.73	26.20	47.3	3.00	20.64	7.16	0.61
9.0	5.66	26.59	51.2	2.68	20.95	7.11	0.68
10.0	5.63	26.68	53.5	2.50	21.02	7.09	0.75
12.0	5.56	27.05	57.3	2.23	21.32	7.04	0.89
14.0	5.37	27.81	74.1	1.20	21.95	6.89	1.01
16.0	5.18	28.01	20.3	6.38	22.12	6.71	1.13
18.0	5.09	27.99	3.2	13.79	22.11	6.63	1.24
20.0	5.07	28.01	1.7	16.21	22.13	6.61	1.36
22.0	5.04	28.00	0.6	20.52	22.13	6.58	1.47



STATION
P7-6

LAT
70 0.3 N

LONG
133 44.7 W

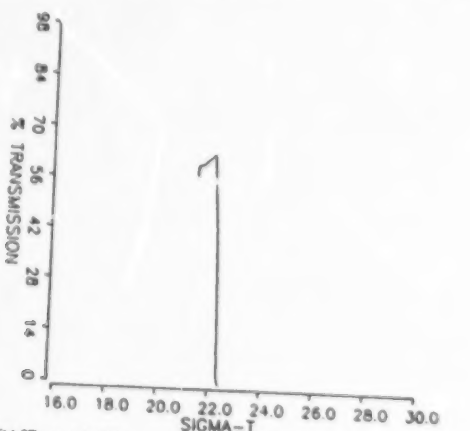
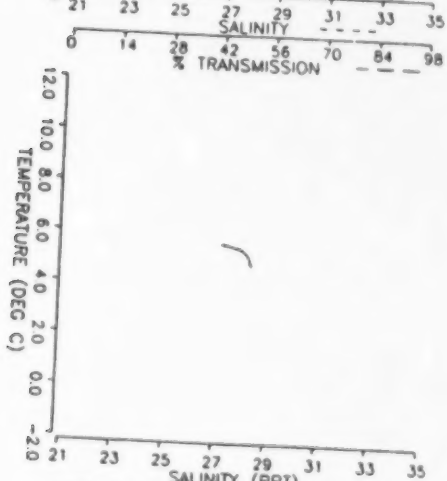
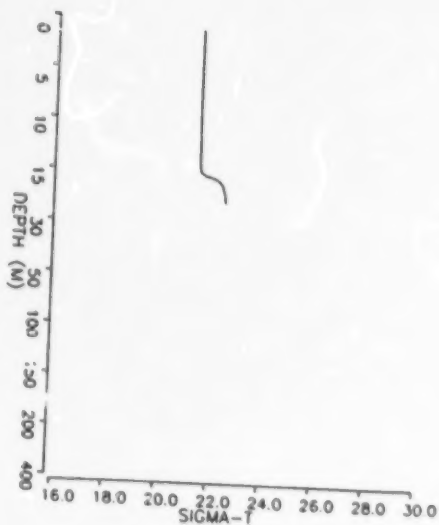
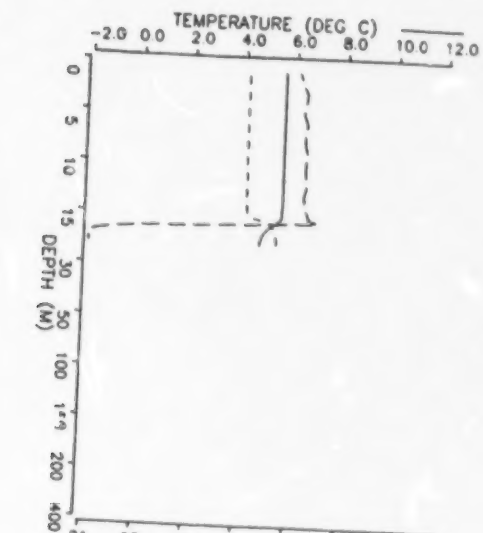
DATE
10:32 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.46	26.18	0.9	18.91	20.65	6.89	0.07
2.0	5.77	25.96	37.4	3.94	20.44	7.19	0.14
3.0	5.78	25.96	43.6	3.32	20.44	7.19	0.22
4.0	5.78	25.96	43.9	3.29	20.44	7.19	0.29
5.0	5.78	25.96	43.1	3.37	20.44	7.19	0.37
6.0	5.77	25.97	42.7	3.40	20.45	7.19	0.44
7.0	5.77	25.99	43.7	3.31	20.47	7.19	0.51
8.0	5.77	26.01	44.7	3.22	20.48	7.19	0.59
9.0	5.73	26.32	45.6	3.14	20.73	7.17	0.66
10.0	5.52	27.41	52.5	2.58	21.61	7.02	0.73
12.0	5.07	28.15	62.6	1.87	22.24	6.61	0.84
14.0	4.80	28.30	6.6	10.87	22.38	6.35	0.95
16.0	4.72	28.31	0.3	23.72	22.40	6.27	1.06
18.0	4.68	28.31	0.0	36.84	22.41	6.23	1.17
20.0	4.66	28.32	0.0	36.84	22.41	6.22	1.28
22.0	4.65	28.32	0.0	36.84	22.42	6.21	1.39
23.0	4.65	28.32	0.0	36.84	22.42	6.21	1.45



STATION LAT LONG DATE
 PS-6 70 1.1 N 133 47.7 W 10:58 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.56	27.13	58.8	2.26	21.39	7.04	0.06
2.0	5.56	27.13	57.7	2.20	21.39	7.04	0.13
3.0	5.57	27.13	58.9	2.12	21.39	7.04	0.19
4.0	5.57	27.13	58.6	2.14	21.39	7.05	0.26
5.0	5.57	27.14	58.2	2.17	21.39	7.05	0.32
6.0	5.57	27.14	59.2	2.10	21.39	7.05	0.39
7.0	5.57	27.14	58.6	2.14	21.39	7.05	0.45
8.0	5.57	27.14	58.6	2.14	21.39	7.05	0.52
9.0	5.57	27.14	59.4	2.08	21.39	7.05	0.58
10.0	5.57	27.14	58.9	2.12	21.39	7.05	0.65
12.0	5.56	27.15	59.3	2.09	21.40	7.05	0.78
14.0	5.56	27.16	58.8	2.13	21.41	7.05	0.90
16.0	5.52	27.39	60.0	2.05	21.59	7.02	1.03
18.0	5.18	28.13	41.9	3.48	22.22	6.72	1.15
20.0	4.90	28.26	2.6	14.57	22.35	6.45	1.26
22.0	4.74	28.34	0.0	36.84	22.42	6.30	1.37
24.0	4.70	28.36	0.0	36.84	22.44	6.26	1.48



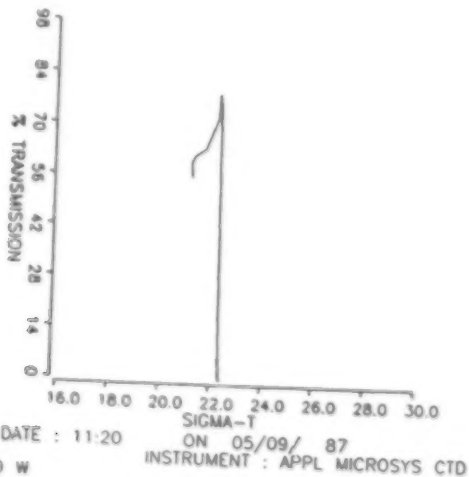
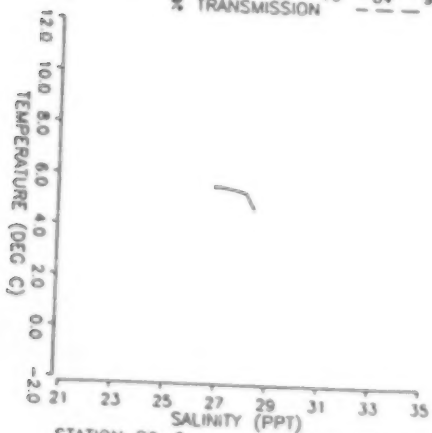
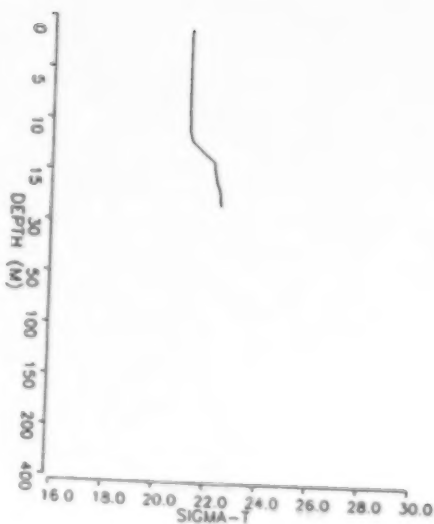
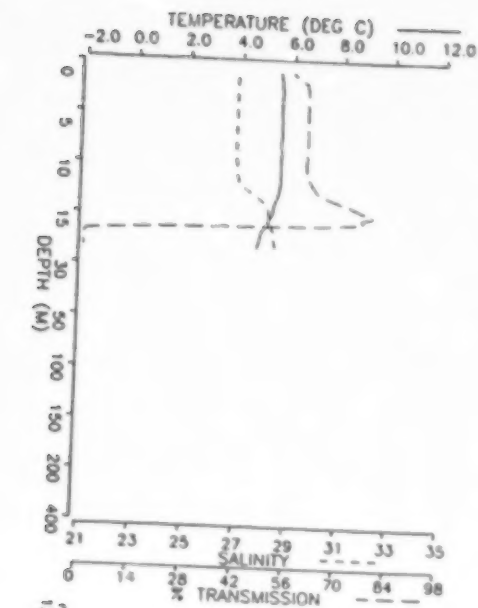
STATION P8-6
WATER DEPTH 27.0 M
LAT : 70 1.10 N LONG : 133 47.70 W

DATE : 10:58

SIGMA-T
ON 05/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION LAT LONG DATE
 P9-6 70 1.6 N 133 48.5 W 11:20 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.49	26.85	55.6	2.35	21.17	6.95	0.07
2.0	5.55	26.81	59.6	2.07	21.14	7.01	0.13
3.0	5.55	26.81	60.0	2.04	21.14	7.01	0.20
4.0	5.55	26.81	60.0	2.05	21.14	7.01	0.27
5.0	5.55	26.81	60.0	2.04	21.14	7.01	0.33
6.0	5.55	26.81	60.1	2.04	21.14	7.02	0.40
7.0	5.55	26.81	60.1	2.04	21.14	7.02	0.47
8.0	5.55	26.82	60.1	2.04	21.14	7.02	0.54
9.0	5.55	26.82	60.1	2.04	21.14	7.02	0.60
10.0	5.55	26.85	59.9	2.05	21.17	7.02	0.67
12.0	5.54	26.97	61.5	1.95	21.26	7.01	0.80
14.0	5.32	28.06	72.0	1.32	22.15	6.85	0.93
16.0	5.13	28.13	75.4	1.13	22.22	6.67	1.04
18.0	5.08	28.18	64.2	1.77	22.26	6.63	1.15
20.0	4.83	28.31	0.7	19.60	22.39	6.39	1.26
22.0	4.77	28.33	0.0	52.74	22.42	6.33	1.37
24.0	4.71	28.36	0.0	36.84	22.45	6.27	1.48
25.0	4.68	28.38	0.0	36.84	22.46	6.24	1.54



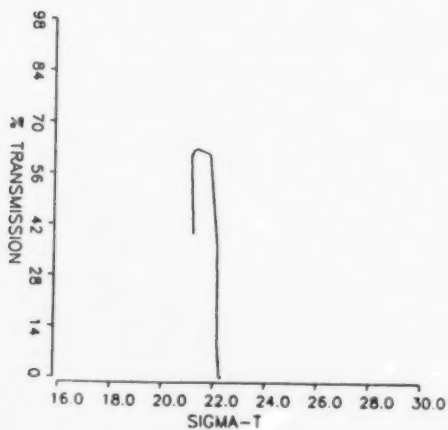
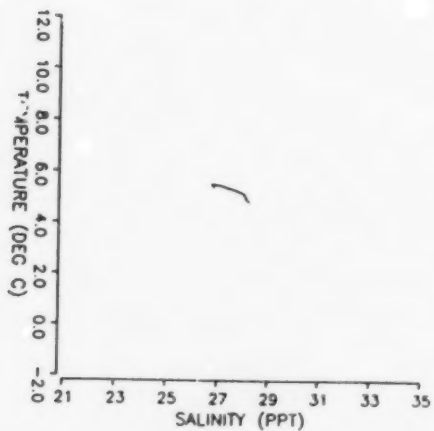
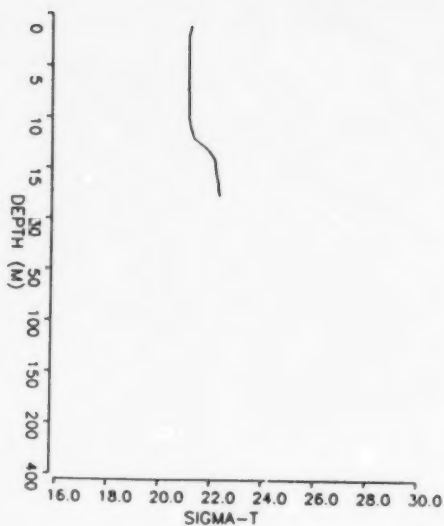
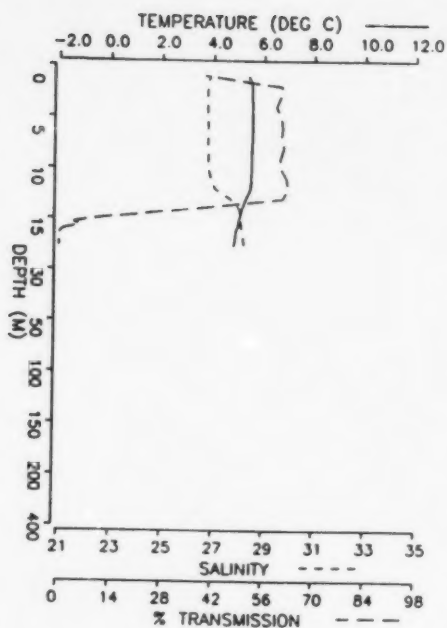
STATION P9-6
WATER DEPTH 27.0 M
LAT : 70 1.60 N LONG : 133 48.50 W

DATE : 11:20

SIGMA-T
ON 05/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION LAT LONG DATE
P10-6 70 1.9 N 133 50.6 W 11:56 PDT ON 05/09/ 87

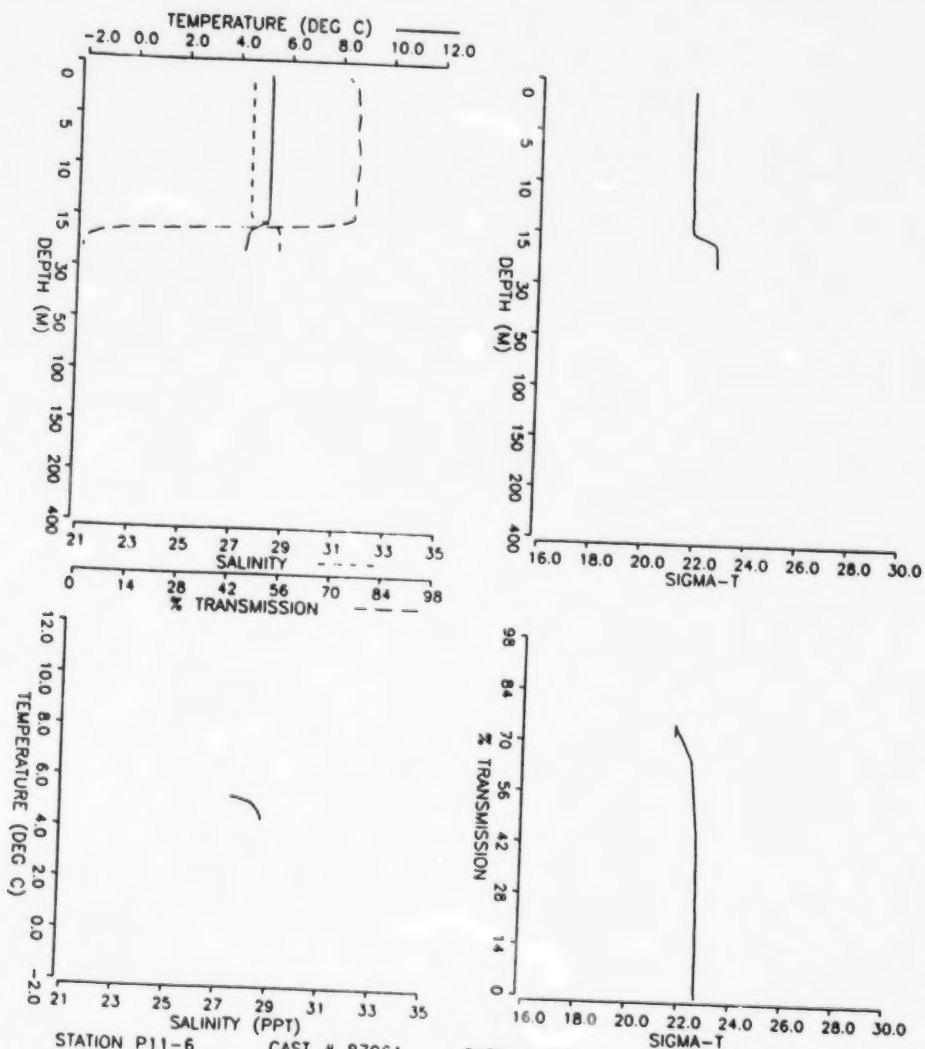
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.36	26.86	39.5	3.72	21.19	6.82	0.07
2.0	5.51	26.76	61.0	1.98	21.10	6.97	0.13
3.0	5.51	26.76	60.5	2.01	21.10	6.97	0.20
4.0	5.51	26.76	59.3	2.09	21.10	6.97	0.27
5.0	5.51	26.76	60.7	2.00	21.10	6.97	0.34
6.0	5.51	26.77	61.0	1.97	21.11	6.98	0.40
7.0	5.51	26.77	60.8	1.99	21.11	6.98	0.47
8.0	5.51	26.78	61.5	1.94	21.12	6.98	0.54
9.0	5.51	26.79	60.6	2.01	21.13	6.98	0.61
10.0	5.51	26.80	60.7	2.00	21.13	6.98	0.67
12.0	5.46	27.06	62.7	1.87	21.34	6.94	0.80
14.0	5.13	28.03	36.1	4.07	22.14	6.66	0.93
16.0	4.99	28.09	4.0	12.83	22.20	6.53	1.04
18.0	4.92	28.13	1.2	17.65	22.21	6.46	1.15
20.0	4.87	28.17	0.2	25.48	22.28	6.42	1.27
22.0	4.84	28.20	0.0	36.84	22.30	6.40	1.38
23.0	4.80	28.24	0.0	36.84	22.34	6.36	1.43



STATION P10-6 CAST # 87060 DATE : 11:56 ON 05/09/ 87
 WATER DEPTH 21.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 1.90 N LONG : 133 50.60 W

STATION LAT LONG DATE
P11-6 70 3.4 N 133 54.8 W 12:32 PDT ON 05/09/ 87

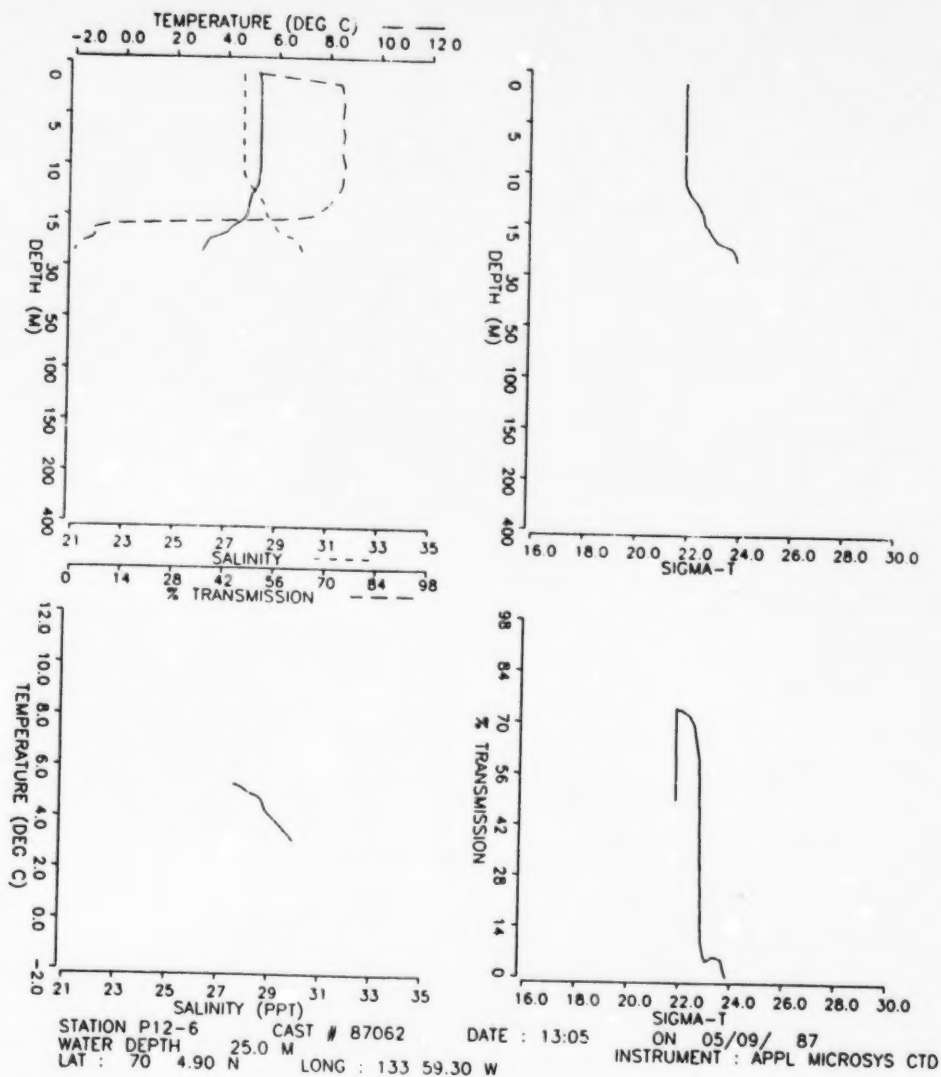
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.22	27.51	71.8	1.33	21.72	6.72	0.06
2.0	5.24	27.50	74.1	1.20	21.72	6.74	0.12
3.0	5.24	27.51	74.3	1.19	21.72	6.74	0.18
4.0	5.24	27.51	74.6	1.17	21.72	6.74	0.25
5.0	5.24	27.51	74.7	1.17	21.72	6.74	0.31
6.0	5.24	27.51	74.4	1.19	21.72	6.74	0.37
7.0	5.24	27.51	74.5	1.18	21.72	6.74	0.43
8.0	5.23	27.51	74.9	1.15	21.72	6.74	0.49
9.0	5.24	27.51	74.9	1.15	21.72	6.74	0.55
10.0	5.24	27.51	75.0	1.15	21.72	6.74	0.61
12.0	5.24	27.52	74.2	1.20	21.73	6.74	0.74
14.0	5.24	27.53	74.2	1.20	21.74	6.75	0.86
16.0	5.18	27.83	70.9	1.38	21.98	6.70	0.98
18.0	4.68	28.57	44.6	3.23	22.61	6.25	1.09
20.0	4.47	28.64	4.8	12.13	22.69	6.04	1.20
22.0	4.41	28.65	0.8	19.41	22.70	5.99	1.30
24.0	4.37	28.65	0.1	29.43	22.71	5.95	1.40
25.0	4.34	28.67	0.0	36.84	22.72	5.92	1.46



STATION P11-6 CAST # 87061 DATE : 12:32 ON 05/09/ 87
 WATER DEPTH 23.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 3.40 N LONG : 133 54.80 W

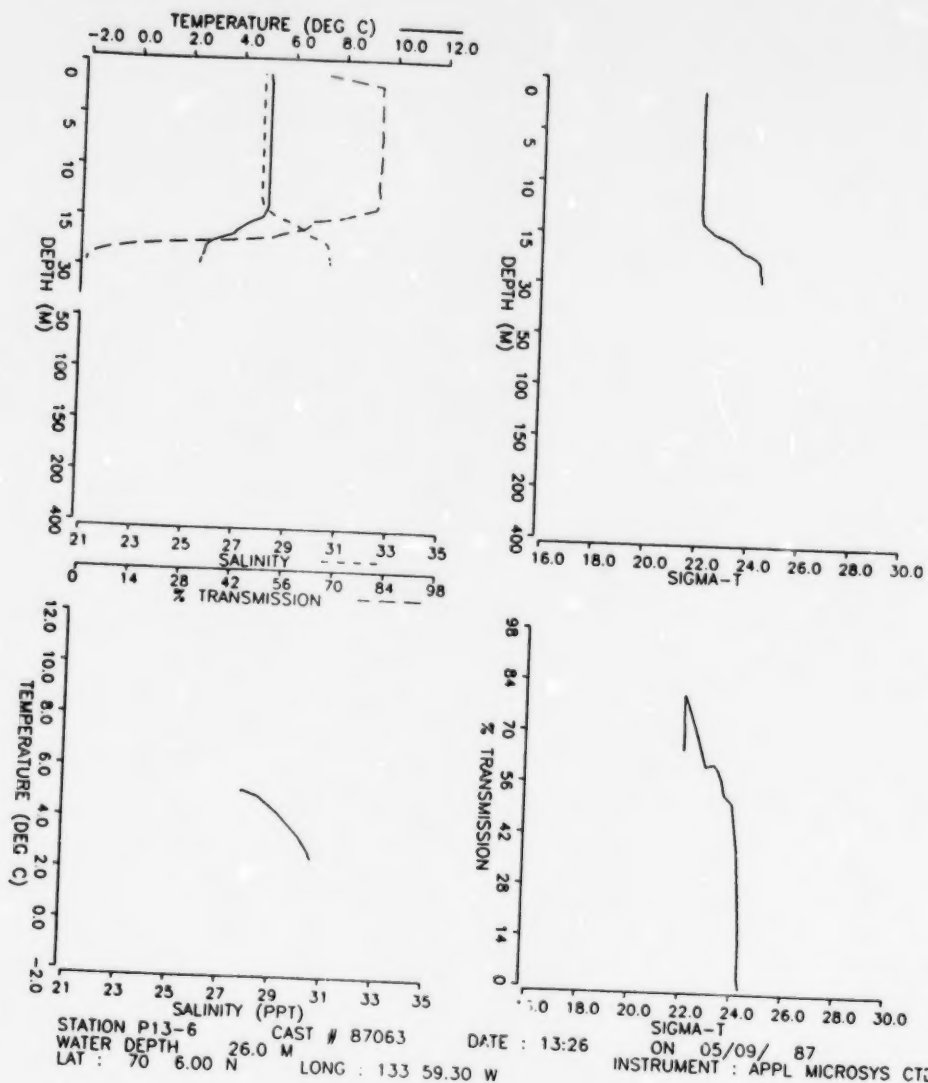
STATION LAT LONG DATE
 P12-6 70 4.9 N 133 59.3 W 13:05 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.24	27.64	48.7	2.87	21.82	6.75	0.06
2.0	5.30	27.62	73.2	1.25	21.80	6.81	0.12
3.0	5.30	27.63	73.6	1.23	21.81	6.80	0.18
4.0	5.30	27.63	73.9	1.21	21.81	6.80	0.24
5.0	5.30	27.63	73.5	1.23	21.81	6.80	0.30
6.0	5.30	27.63	73.5	1.23	21.81	6.81	0.36
7.0	5.30	27.63	74.0	1.20	21.81	6.81	0.42
8.0	5.30	27.63	73.6	1.23	21.81	6.81	0.48
9.0	5.29	27.64	73.7	1.22	21.82	6.80	0.54
10.0	5.29	27.64	74.3	1.19	21.82	6.80	0.61
12.0	5.19	27.86	73.7	1.22	22.00	6.72	0.73
14.0	4.85	28.47	69.6	1.45	22.52	6.41	0.84
16.0	4.68	28.70	60.3	2.03	22.72	6.26	0.94
18.0	4.29	28.83	10.0	9.21	22.86	5.88	1.05
20.0	4.04	29.05	4.7	12.25	23.06	5.64	1.14
22.0	3.36	29.73	5.2	11.80	23.65	5.00	1.24
24.0	3.18	29.88	1.5	16.89	23.78	4.83	1.32
26.0	3.04	29.98	0.1	29.12	23.88	4.69	1.40



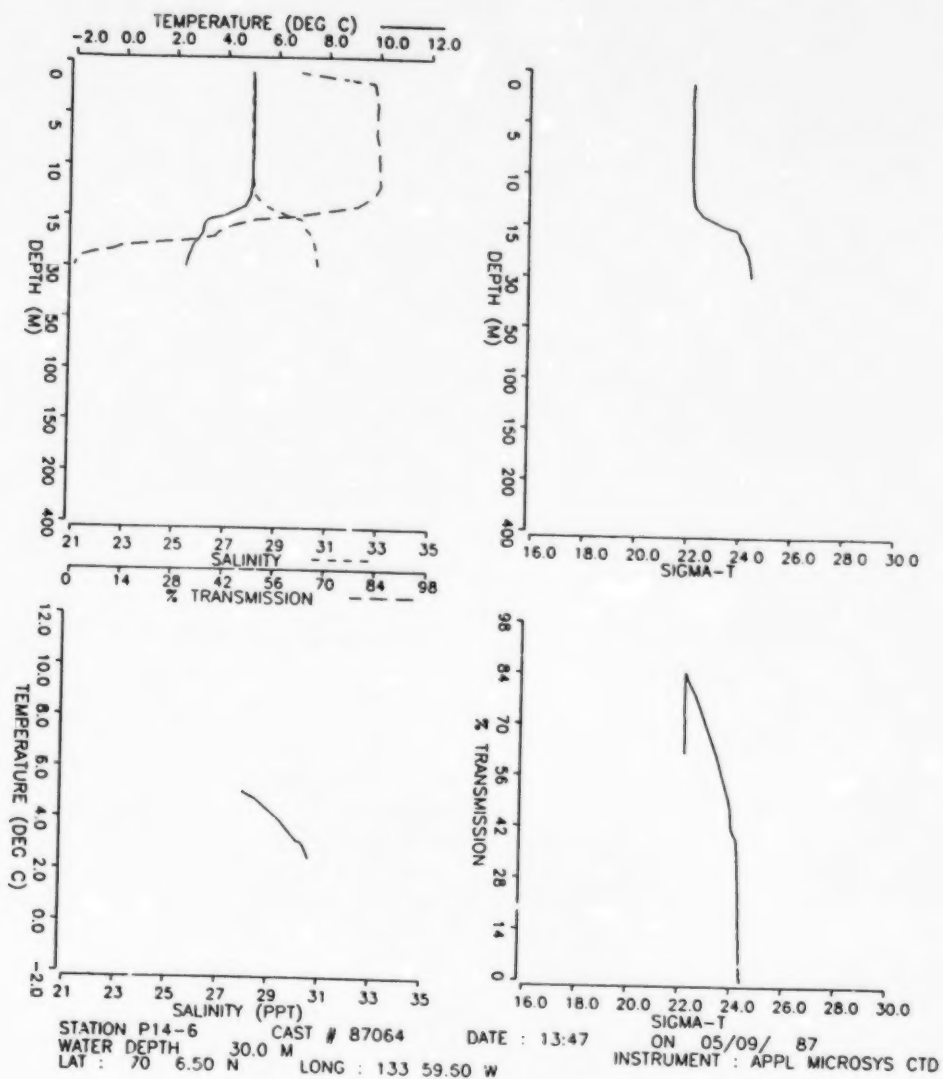
STATION LAT LONG DATE
P13-6 70 6.0 N 133 59.3 W 13:26 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.05	27.82	65.1	1.72	21.98	6.57	0.06
2.0	5.09	27.80	80.1	0.89	21.97	6.60	0.12
3.0	5.09	27.81	79.8	0.90	21.97	6.60	0.18
4.0	5.09	27.81	80.2	0.88	21.97	6.60	0.24
5.0	5.09	27.81	80.2	0.88	21.97	6.60	0.29
6.0	5.09	27.81	80.2	0.88	21.97	6.60	0.35
7.0	5.09	27.81	80.2	0.88	21.97	6.61	0.41
8.0	5.08	27.81	80.2	0.88	21.97	6.61	0.47
9.0	5.09	27.81	80.2	0.88	21.97	6.61	0.53
10.0	5.08	27.81	80.2	0.89	21.97	6.61	0.59
12.0	5.08	27.81	79.8	0.90	21.98	6.61	0.71
14.0	5.08	27.90	79.3	0.93	22.05	6.61	0.83
16.0	4.56	28.84	60.7	2.00	22.84	6.14	0.93
18.0	4.10	29.36	60.1	2.03	23.29	5.72	1.03
20.0	3.77	29.67	53.1	2.53	23.57	5.40	1.12
22.0	2.98	30.30	38.1	3.86	24.14	4.65	1.20
24.0	2.68	30.47	11.7	8.58	24.30	4.36	1.27
26.0	2.61	30.48	2.8	14.28	24.31	4.29	1.35
28.0	2.49	30.55	0.2	24.27	24.37	4.17	1.42
29.0	2.47	30.56	0.0	33.45	24.38	4.18	1.46



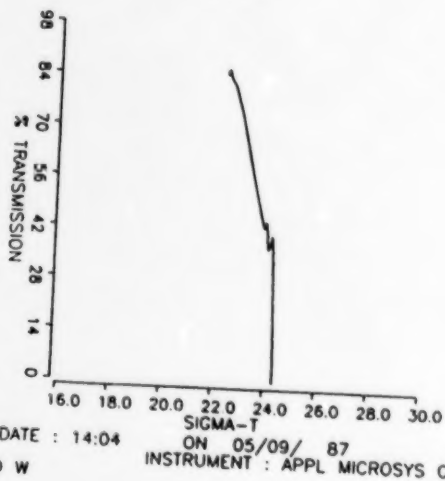
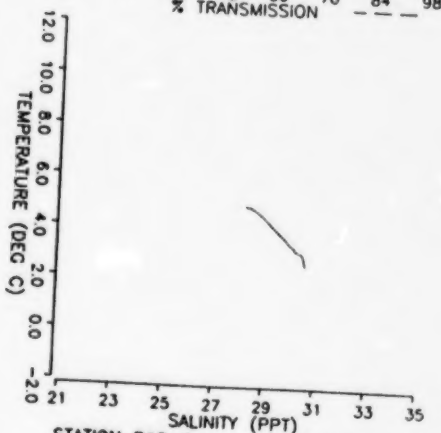
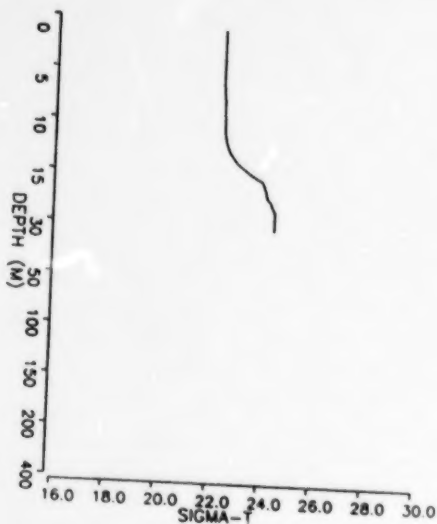
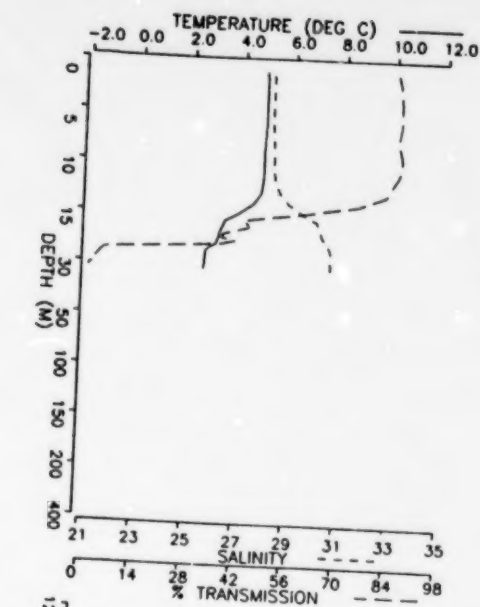
STATION P14-6 LAT 70 6.5 N LONG 133 59.6 W DATE 13:47 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.00	28.02	62.2	1.90	22.15	6.52	0.06
2.0	5.03	28.00	82.6	0.76	22.13	6.56	0.11
3.0	5.03	27.99	83.1	0.74	22.12	6.56	0.17
4.0	5.03	28.00	83.4	0.73	22.12	6.56	0.23
5.0	5.03	28.00	83.3	0.73	22.13	6.56	0.29
6.0	5.03	28.00	83.5	0.72	22.13	6.56	0.34
7.0	5.03	28.00	83.2	0.74	22.13	6.56	0.40
8.0	5.02	28.00	83.9	0.70	22.13	6.55	0.46
9.0	5.02	28.01	84.1	0.69	22.13	6.55	0.52
10.0	5.02	28.01	84.1	0.69	22.14	6.55	0.57
12.0	4.99	28.04	84.4	0.68	22.16	6.53	0.69
14.0	4.75	28.51	78.1	0.99	22.56	6.31	0.80
16.0	3.31	29.96	50.1	2.77	23.84	4.96	0.89
18.0	3.12	30.11	43.1	3.37	23.97	4.78	0.97
20.0	3.09	30.29	39.6	3.70	24.12	4.76	1.05
22.0	2.91	30.42	33.8	4.33	24.24	4.58	1.13
24.0	2.68	30.50	13.1	8.13	24.32	4.36	1.20
26.0	2.59	30.54	5.2	11.86	24.36	4.27	1.27
28.0	2.50	30.57	0.9	19.06	24.39	4.19	1.34
30.0	2.45	30.60	0.0	30.64	24.42	4.14	1.42



STATION	LAT	LONG	DATE
P15-6	70 7.5 N	133 59.7 W	14:04 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.89	28.15	84.4	0.68	22.26	6.42	0.06
2.0	4.89	28.16	85.1	0.65	22.27	6.43	0.11
3.0	4.89	28.16	85.5	0.63	22.27	6.43	0.17
4.0	4.90	28.16	85.6	0.62	22.27	6.43	0.22
5.0	4.90	28.16	85.6	0.62	22.27	6.43	0.28
6.0	4.89	28.16	85.6	0.62	22.27	6.43	0.34
7.0	4.88	28.19	85.1	0.64	22.29	6.42	0.39
8.0	4.85	28.22	85.1	0.65	22.32	6.40	0.45
9.0	4.85	28.23	85.9	0.61	22.33	6.39	0.50
10.0	4.84	28.24	86.0	0.60	22.33	6.39	0.56
12.0	4.82	28.34	83.5	0.72	22.42	6.38	0.67
14.0	4.48	28.87	74.4	1.18	22.87	6.07	0.78
16.0	3.65	29.71	50.0	2.77	23.61	5.29	0.87
18.0	3.32	30.06	43.9	3.29	23.91	4.97	0.95
20.0	3.17	30.17	40.5	3.61	24.02	4.84	1.03
22.0	3.13	30.25	36.7	4.01	24.08	4.79	1.11
24.0	3.03	30.45	36.1	4.08	24.25	4.71	1.18
26.0	2.62	30.56	4.7	12.19	24.37	4.31	1.26
28.0	2.60	30.57	2.9	14.14	24.38	4.29	1.33
30.0	2.59	30.57	2.3	15.09	24.38	4.28	1.40
32.0	2.57	30.58	0.6	20.66	24.39	4.26	1.47



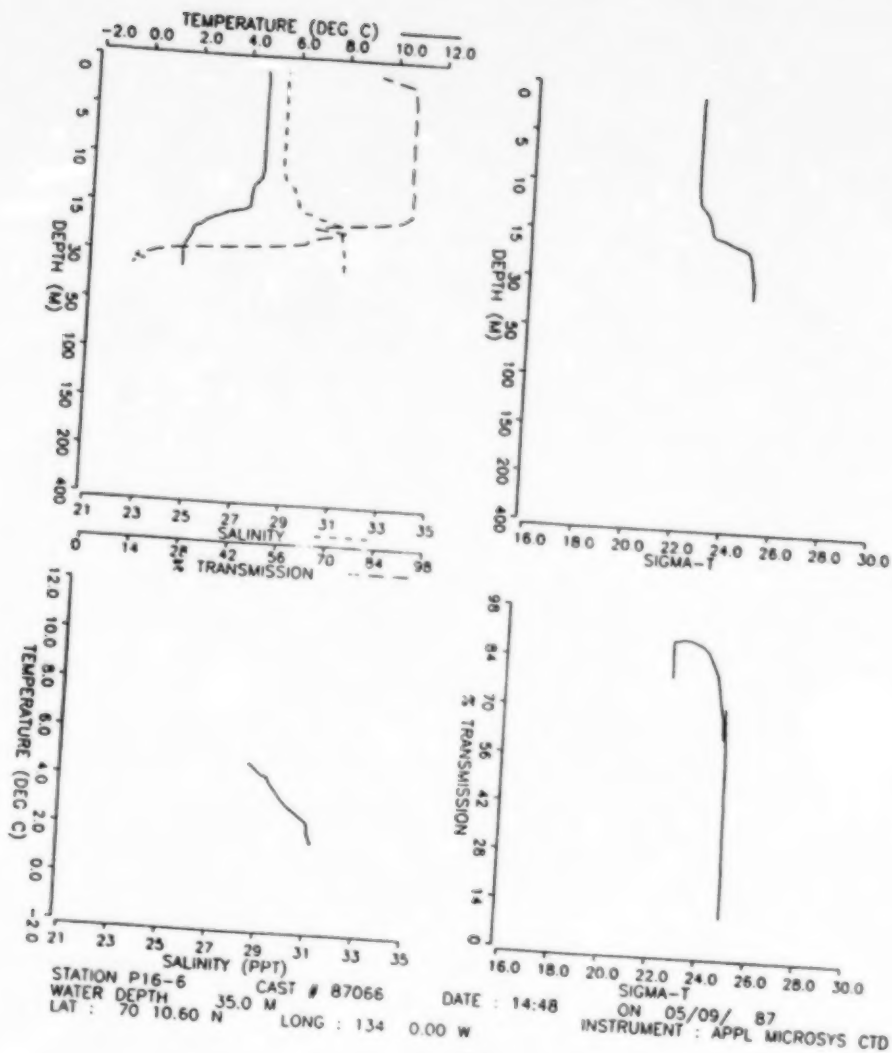
STATION P15-6 CAST # 87065
WATER DEPTH 31.0 M
LAT : 70 7.50 N LONG : 133 59.70 W

DATE : 14:04

SIGMA-T
ON 05/09/ 87
INSTRUMENT : APPL MICROSYS CTD

STATION LAT LONG DATE
P16-6 70 10.6 N 134 0.0 W 14:48 PDT ON 05/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.68	28.51	79.2	0.93	22.57	6.24	0.05
2.0	4.71	28.49	89.2	0.46	22.55	6.27	0.11
3.0	4.71	28.50	89.4	0.45	22.55	6.27	0.16
4.0	4.71	28.50	89.7	0.43	22.56	6.27	0.21
5.0	4.71	28.50	89.7	0.44	22.56	6.27	0.27
6.0	4.71	28.50	89.7	0.43	22.56	6.27	0.32
7.0	4.71	28.50	89.7	0.44	22.56	6.27	0.37
8.0	4.71	28.50	89.7	0.43	22.56	6.27	0.43
9.0	4.71	28.50	89.7	0.43	22.56	6.27	0.48
10.0	4.71	28.50	89.7	0.43	22.56	6.27	0.53
12.0	4.65	28.59	89.8	0.43	22.63	6.22	0.64
14.0	4.24	29.14	90.2	0.41	23.11	5.84	0.74
16.0	3.99	29.33	90.1	0.42	23.28	5.60	0.83
18.0	3.01	30.14	86.9	0.56	24.01	4.67	0.92
20.0	2.42	30.93	68.1	1.54	24.68	4.13	0.99
22.0	1.97	31.01	71.4	1.35	24.78	3.68	1.05
24.0	1.88	31.05	63.7	1.80	24.81	3.60	1.12
26.0	1.74	31.10	60.0	2.04	24.86	3.45	1.18
28.0	1.58	31.13	34.7	4.23	24.90	3.30	1.24
30.0	1.56	31.18	17.2	7.05	24.94	3.29	1.30
35.0	1.57	31.18	11.5	8.65	24.94	3.30	1.46
36.0	1.57	31.18	10.7	8.94	24.94	3.30	1.49



STATION
YS1-6

LAT
69 58.0 N

LONG
131 31.3 W

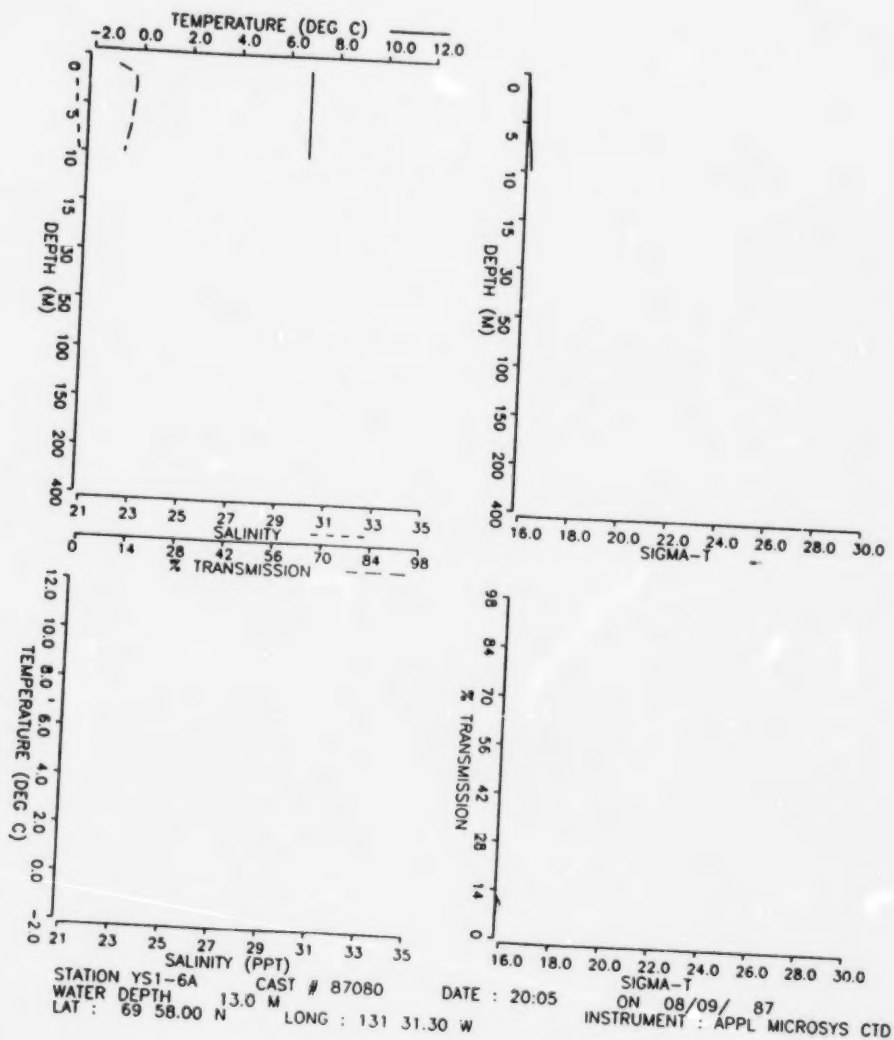
DATE
19:35 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	8.83	17.19	13.4	8.05	13.23	9.76	0.14
2.0	8.79	17.22	15.4	7.48	13.26	9.72	0.29
3.0	8.80	17.19	15.8	7.38	13.24	9.73	0.43
4.0	8.76	17.23	16.0	7.33	13.27	9.69	0.58
5.0	8.83	17.17	16.1	7.30	13.21	9.76	0.72
6.0	8.82	17.18	16.2	7.29	13.22	9.76	0.87
7.0	8.79	17.19	16.4	7.23	13.24	9.73	1.01
8.0	8.80	17.22	15.4	7.48	13.26	9.74	1.15
9.0	8.79	17.31	13.9	7.88	13.33	9.73	1.30
10.0	8.82	17.36	13.0	8.15	13.36	9.76	1.44



STATION LAT LONG DATE
 YS1-6A 69 58.0 N 131 31.3 W 20:05 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.85	20.24	7.0	10.64	15.84	7.95	0.12
2.0	6.86	20.27	11.9	8.50	15.86	7.95	0.24
3.0	6.86	20.29	12.2	8.42	15.87	7.96	0.36
4.0	6.86	20.31	11.9	8.51	15.88	7.96	0.47
5.0	6.86	20.32	11.6	8.63	15.90	7.97	0.59
6.0	6.86	20.33	11.3	8.71	15.90	7.96	0.71
7.0	6.86	20.38	11.1	8.78	15.94	7.97	0.83
8.0	6.86	20.42	10.5	9.02	15.97	7.97	0.95
9.0	6.86	20.45	9.9	9.26	16.00	7.98	1.06
10.0	6.87	20.49	9.3	9.49	16.02	7.98	1.18



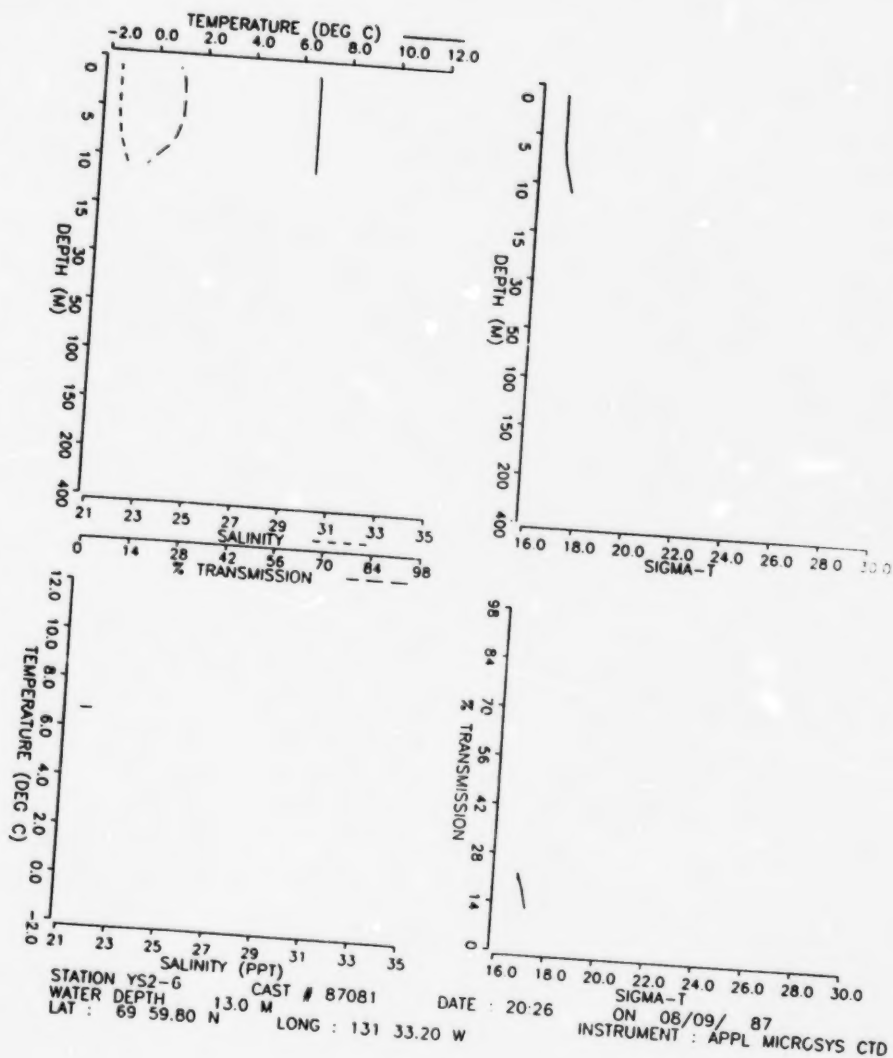
STATION
YS2-6

LAT
69 59.8 N

LONG
131 33.2 W

20:26 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.71	21.48	20.4	6.35	16.82	7.88	0.11
2.0	6.72	21.47	21.7	6.12	16.81	7.88	0.22
3.0	6.72	21.47	21.8	6.09	16.81	7.89	0.33
4.0	6.72	21.47	22.3	6.01	16.81	7.89	0.44
5.0	6.72	21.48	22.0	6.05	16.82	7.89	0.55
6.0	6.72	21.49	21.9	6.08	16.83	7.89	0.65
7.0	6.72	21.53	21.1	6.22	16.86	7.89	0.76
8.0	6.72	21.59	20.2	6.40	16.90	7.90	0.87
9.0	6.72	21.69	18.2	6.82	16.98	7.91	0.98
10.0	6.73	21.81	15.1	7.56	17.08	7.92	1.09
11.0	6.73	21.95	12.1	8.45	17.19	7.93	1.19



STATION
YS3-6

LAT
70 1.7 N 131

LONG
35.3 W

DATE
20:50 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.60	22.69	4.8	12.11	17.78	7.83	0.10
2.0	6.64	22.68	11.5	8.65	17.77	7.87	0.20
3.0	6.64	22.67	19.1	6.62	17.77	7.87	0.30
4.0	6.64	22.67	19.4	6.55	17.76	7.87	0.40
5.0	6.64	22.67	19.8	6.48	17.77	7.87	0.50
6.0	6.64	22.68	19.9	6.46	17.77	7.87	0.60
7.0	6.64	22.68	20.6	6.32	17.77	7.87	0.70
8.0	6.64	22.68	19.4	6.56	17.77	7.88	0.80
9.0	6.66	22.73	16.7	7.15	17.81	7.90	0.90
10.0	6.66	22.74	14.3	7.77	17.81	7.90	1.00
12.0	6.70	22.84	8.3	9.96	17.89	7.95	1.20



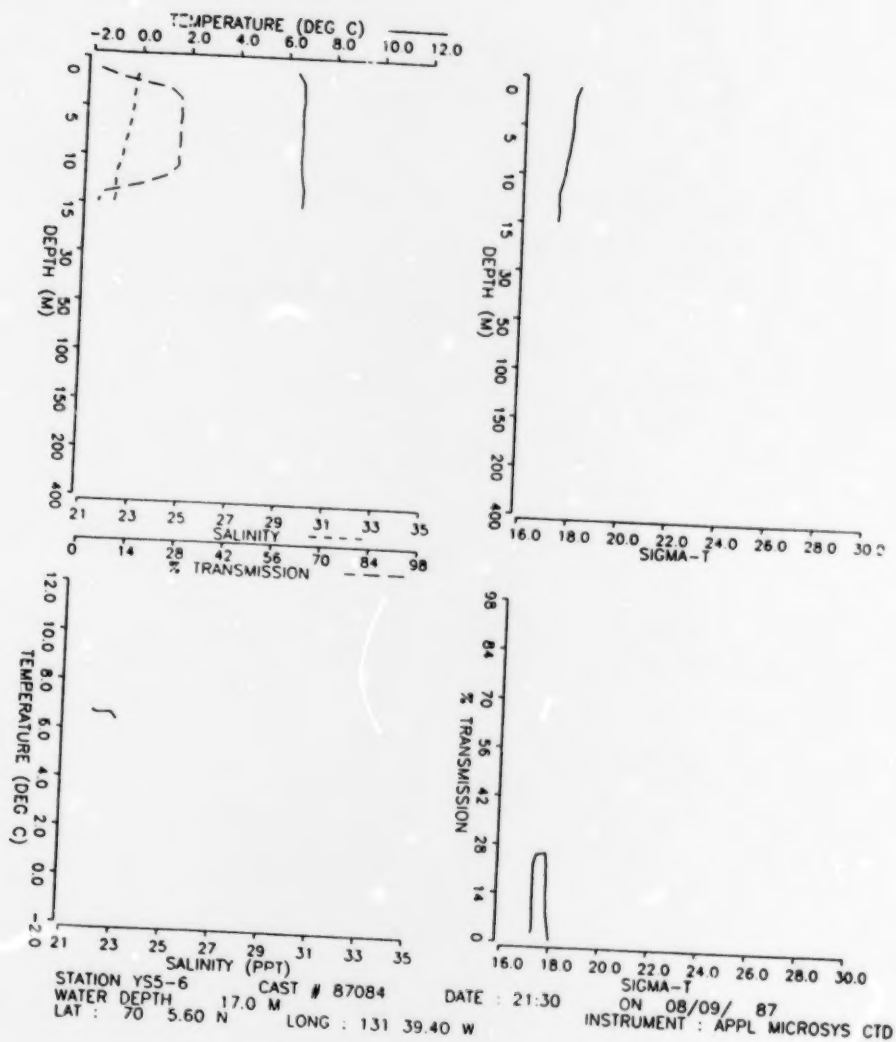
STATION LAT LONG DATE
 YS4-6 70 3.6 N 131 37.2 W 21:14 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.65	22.58	11.8	8.55	17.69	7.87	0.10
2.0	6.69	22.57	23.5	5.80	17.68	7.91	0.20
3.0	6.68	22.56	22.9	5.89	17.67	7.91	0.30
4.0	6.66	22.59	23.8	5.74	17.70	7.89	0.40
5.0	6.69	22.55	24.0	5.70	17.67	7.92	0.50
6.0	6.69	22.55	24.2	5.67	17.67	7.92	0.60
7.0	6.68	22.57	23.8	5.73	17.68	7.91	0.70
8.0	6.69	22.56	23.4	5.81	17.67	7.92	0.81
9.0	6.69	22.59	22.6	5.94	17.70	7.92	0.91
10.0	6.69	22.60	21.8	6.09	17.70	7.92	1.01
12.0	6.68	22.71	14.6	7.69	17.79	7.92	1.21
14.0	6.66	22.79	3.8	13.06	17.85	7.91	1.40



STATION YS5-6 LAT 70 5.6 N 131 LONG 39.4 W 21:30 PDT ON DATE 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.40	22.98	0.6	20.55	18.03	7.65	0.10
2.0	6.67	22.79	8.6	9.80	17.86	7.91	0.20
3.0	6.69	22.74	22.2	6.02	17.81	7.93	0.29
4.0	6.70	22.70	25.5	5.47	17.78	7.93	0.39
5.0	6.67	22.70	25.6	5.44	17.78	7.90	0.49
6.0	6.67	22.64	25.7	5.43	17.73	7.90	0.59
7.0	6.69	22.56	25.5	5.47	17.67	7.91	0.69
8.0	6.67	22.49	25.5	5.47	17.62	7.90	0.80
9.0	6.67	22.38	25.4	5.48	17.53	7.89	0.90
10.0	6.65	22.32	25.2	5.52	17.48	7.87	1.00
12.0	6.71	22.05	22.5	5.96	17.27	7.91	1.21
14.0	6.76	22.09	3.7	13.18	17.30	7.97	1.42
15.0	6.75	22.03	2.6	14.58	17.25	7.95	1.52



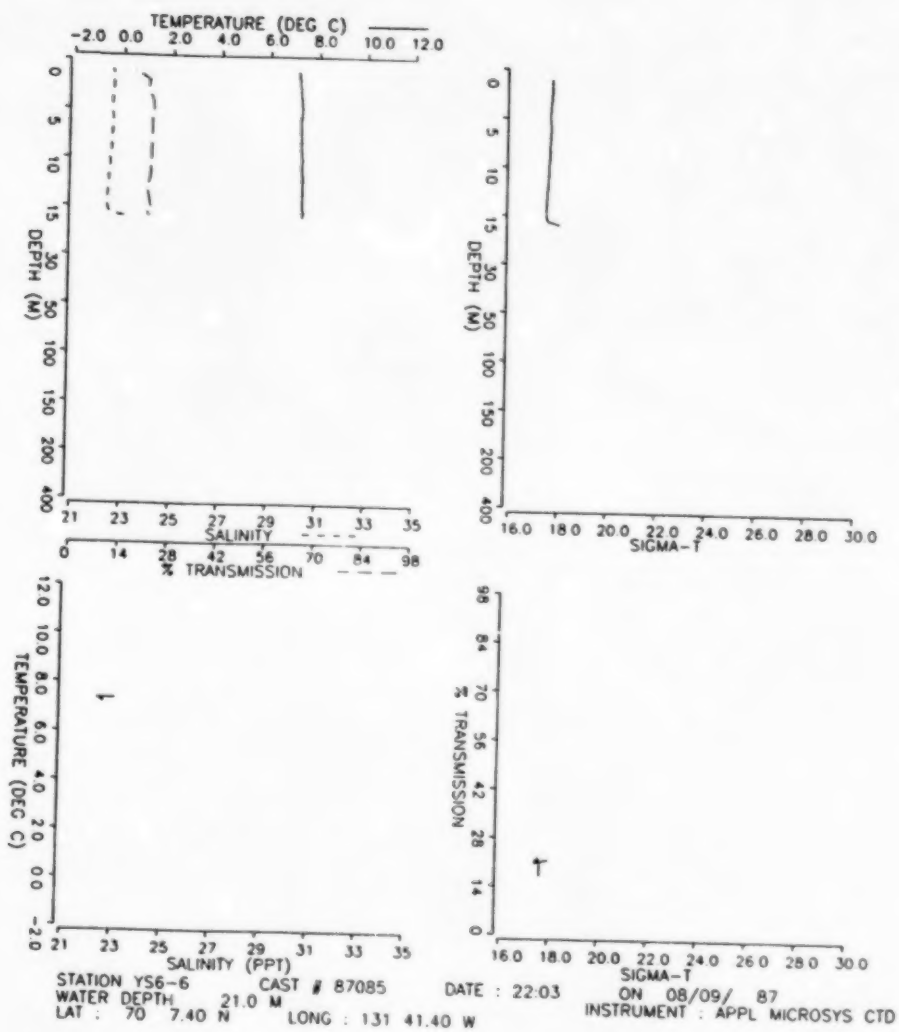
STATION
YS6-6

LAT
70 7.4 N 131

LONG
41.4 W

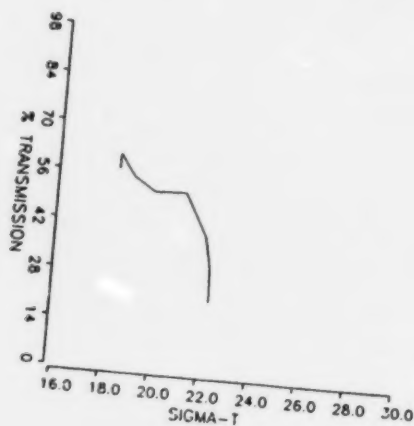
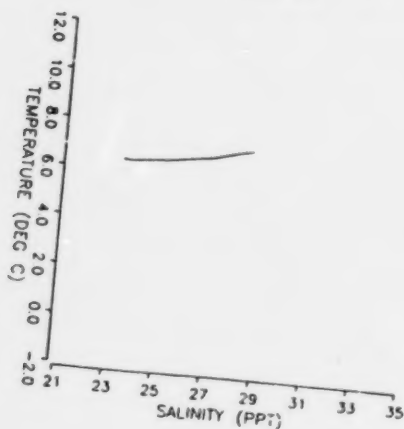
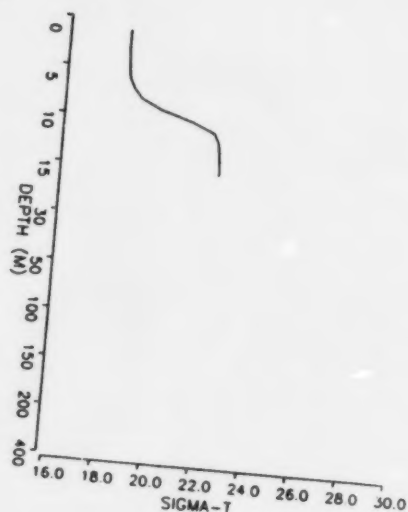
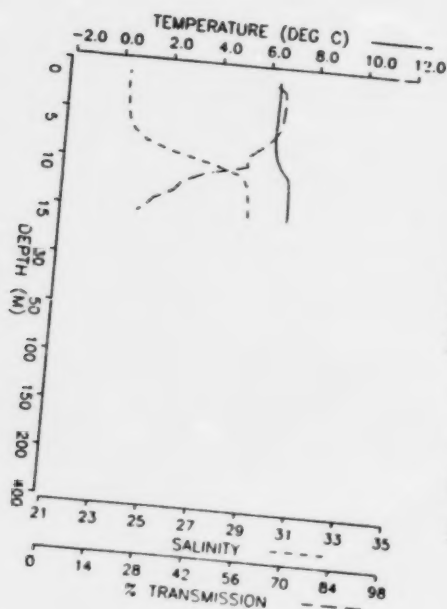
DATE
22:03 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	7.16	22.57	16.9	7.11	17.63	8.39	0.10
2.0	7.21	22.58	21.1	6.21	17.63	8.43	0.20
3.0	7.23	22.58	20.8	6.27	17.63	8.46	0.30
4.0	7.27	22.53	22.3	6.01	17.59	8.49	0.40
5.0	7.29	22.50	22.5	5.97	17.56	8.51	0.51
6.0	7.25	22.55	21.9	6.07	17.61	8.48	0.61
7.0	7.26	22.53	22.0	6.05	17.59	8.49	0.71
8.0	7.28	22.51	22.0	6.06	17.57	8.51	0.81
9.0	7.27	22.51	21.9	6.08	17.57	8.50	0.91
10.0	7.31	22.46	21.8	6.09	17.52	8.53	1.02
12.0	7.32	22.42	21.6	6.12	17.49	8.55	1.22
14.0	7.34	22.36	21.3	6.19	17.44	8.56	1.43
16.0	7.36	22.37	20.5	6.35	17.45	8.58	1.63
18.0	7.36	23.08	21.5	6.15	18.01	8.63	1.83



STATION 50-6 LAT 70 33.1 N 129 LONG 35.4 W DATE 09:24 PDT ON 08/09/ 87

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.41	23.28	56.6	2.27	18.26	7.67	0.09
2.0	6.41	23.27	60.5	2.01	18.26	7.68	0.19
3.0	6.41	23.27	60.9	1.99	18.26	7.68	0.28
4.0	6.41	23.32	60.6	2.00	18.30	7.67	0.38
5.0	6.40	23.35	60.5	2.01	18.32	7.67	0.47
6.0	6.39	23.43	59.9	2.03	18.38	7.66	0.57
7.0	6.38	23.65	57.9	2.19	18.56	7.67	0.66
8.0	6.42	24.12	54.7	2.41	18.92	7.74	0.75
9.0	6.50	25.18	51.0	2.70	19.75	7.88	0.84
10.0	6.71	26.86	51.2	2.67	21.05	8.18	0.91
12.0	7.07	28.35	33.0	4.44	22.18	8.63	1.03
14.0	7.10	28.46	25.0	5.54	22.26	8.66	1.15
16.0	7.09	28.50	20.7	6.31	22.29	8.66	1.26



STATION 50-6 CAST # 87040 DATE : 09:24 ON 11/06/ 87
 WATER DEPTH 18.0 M INSTRUMENT : APPL MICROSYS CTD
 LAT : 70 33.10 N LONG : 129 35.40 W

NOGAP B.6 Data Reports in the Canadian Data Report of Hydrography and Ocean Sciences Series

- Macdonald, R.W., K. Iseki, E.C. Carmack, D.M. Macdonald, M.C. O'Brien, and F.A. McLaughlin, 1988. Data Report: NOGAP B.6; Beaufort Sea Oceanography, September, 1986. *Can. Data Rep. Hydrogr. Ocean Sci.*: 58, 68pp.
- Cuypers, L.E., A.W. Blaskovich, E.C. Carmack, and R.W. Macdonald, 1988. NOGAP B.6; Physical data collected in the Beaufort Sea, September, 1986. *Can. Data Rep. Hydrogr. Ocean Sci.*: 59, 149pp.
- McCullough, D., R.W. Macdonald, K. Iseki, and E.C. Carmack, 1988. NOGAP B.6; Volume 1: Beaufort Sea current measurements, March-August 1987. *Can. Data Rep. Hydrogr. Ocean Sci.*: 60(1), 42pp.
- Macdonald, D.M., L.E. Cuypers, D. McCullough, E. Carmack, and R.W. Macdonald, 1988. NOGAP B.6; Volume 2: Physical data collected in the Beaufort Sea, March-June 1987. *Can. Data Rep. Hydrogr. Ocean Sci.*: 60 (2), 157 pp.
- McCullough, D., R.W. Macdonald, K. Iseki, and E.C. Carmack, 1988. NOGAP B.6; Volume 3: Beaufort Sea current measurements, September, 1987 - March, 1988. *Can. Data Rep. Hydrogr. Ocean Sci.*: 60 (3), 37pp.
- R.W. Macdonald, K. Iseki, M.C. O'Brien, F.A. McLaughlin, D. McCullough, D.M. Macdonald, E.C. Carmack, H. Adams, M. Yunker, G. Miskulin and S. Buckingham, 1988. NOGAP B.6; Volume 4: Chemical data collected in the Beaufort Sea, Summer 1987. *Can. Data Rep. Hydrogr. Ocean Sci.*: 60(4), 103pp.
- Macdonald, R.W., K. Iseki, M.C. O'Brien, F.A. McLaughlin, D. McCullough, D.M. Macdonald, E.C. Carmack, M. Yunker, S. Buckingham and G. Miskulin, 1988. NOGAP B.6; Volume 5: Chemical data collected in the Beaufort Sea and Mackenzie River Delta, March-July 1987. *Can. Data Rep. Hydrogr. Ocean Sci.*: 60(5), 56 pp